



**Hewlett Packard**  
Enterprise

# **HPE Database and Middleware Automation**

Ultimate Edition

Software Version: 10.40  
Linux, Solaris, AIX, and HP-UX

Developing Guide

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# Developing

This section lists application programming interfaces (APIs) that helps you work with HPE DMA.

Resource Family	APIs
Automation	<ul style="list-style-type: none"> <li>• <a href="#">"Functions API" on page 41</a></li> <li>• <a href="#">"Steps API" on page 28</a></li> <li>• <a href="#">"Workflows API" on page 10</a></li> <li>• <a href="#">"Policies API" on page 64</a></li> <li>• <a href="#">"Deployments API" on page 52</a></li> <li>• <a href="#">"Running Workflows API" on page 73</a></li> </ul>
Environment	<ul style="list-style-type: none"> <li>• <a href="#">"Organizations API" on page 90</a></li> <li>• <a href="#">"Servers API" on page 98</a></li> <li>• <a href="#">"Instances API" on page 108</a></li> <li>• <a href="#">"Databases API" on page 118</a></li> <li>• <a href="#">"Smart Groups API" on page 125</a></li> <li>• <a href="#">"Custom Fields API" on page 138</a></li> <li>• <a href="#">"Unassigned Servers API" on page 146</a></li> </ul>
Setup	<ul style="list-style-type: none"> <li>• <a href="#">"Roles API" on page 150</a></li> <li>• <a href="#">"Capabilities API" on page 161</a></li> <li>• <a href="#">"Version API" on page 171</a></li> <li>• <a href="#">"User API" on page 169</a></li> </ul>
Solution Pack	<ul style="list-style-type: none"> <li>• <a href="#">"Solution Packs API" on page 173</a></li> </ul>

# Workflows API

In HPE DMA, a workflow executes a process—such as installing a software product or checking a database instance for compliance with a specific security benchmark.

The Workflow API provides a mechanism that enables you to read, create, modify and delete HPE DMA workflows. The capabilities associated with your role determine which Workflow API operations you are permitted to perform (see "[Permissions and Constraints](#)").

To run a workflow or retrieve status about workflows that are running, see "[Running Workflows API](#)".

## Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/auto/workflow By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	workflow

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Workflows can only be created (POST) by users who have a role with Administrator or Workflow Creator capability.
- A workflow can only be viewed (GET) by users who have READ permission for that workflow.
- A workflow can only be modified (PUT) by users who have READ and WRITE permission for that workflow.
- Workflow names must contain one or more characters.
- Workflow names must be unique.
- A workflow MUST have at least one step.
- The Target Level of a workflow cannot be modified if the workflow is used by one or more deployments.
- A workflow can only be deleted by one of the following types of users:
  - A user who has a role with Administrator capability.

- A user who has a role with Workflow Creator capability and who also has READ and WRITE permissions for that workflow.
- Locked workflows cannot be modified or deleted. Workflows included in an HPE DMA solution pack are locked. You cannot unlock a workflow. You can, however, make a modifiable copy of a locked workflow. You can also change the permissions on a locked workflow.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the workflow to GET. Workflows must have non-empty unique names when they are created or modified.  Example: Apply%20CRS%20Patchset%20to%20Home

## Object Identifier

When you want to modify (PUT) or DELETE a specific workflow, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/setup/workflow/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT, DELETE  not valid for POST	Unique alpha-numeric identifier of the workflow  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_	The PUT, POST, or DELETE could not be completed, because the user does not

Code	Meaning
FORBIDDEN	have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all workflows	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/workflow</p> <p>Response Body (only the first two entries are shown here):</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:l="http://www.hp.com/dma/sop/location"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T17:22:26Z&lt;/updated&gt;   &lt;title&gt;Workflows&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cfda a7aa9113f&lt;/id&gt;   &lt;published&gt;2013-02-21T16:51:13Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:51:13Z&lt;/updated&gt;   &lt;title&gt;Add or Alter an ASM Diskgroup&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml'</pre>

Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;sop:workflow name='Add or Alter an ASM Diskgroup' type='Oracle' target- level='Instance' locked='true' /&gt;   &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdabb8013cfda c47491684&lt;/id&gt;   &lt;published&gt;2013-02-21T16:53:11Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:53:11Z&lt;/updated&gt;   &lt;title&gt;Add WebSphere 7 Node To Existing Cell&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdabb8013cf dac47491684' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdabb8013cf dac47491684' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfdabb8013cf dac47491684' /&gt;   &lt;sop:workflow name='Add WebSphere 7 Node To Existing Cell' type='OS' target-level='Server' locked='true' /&gt;   &lt;/entry&gt; ... <i>only the first two entries are shown here</i> </pre>
<p>Get a specific workflow by ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cfdaa7aa9113f</p> <p>Response Body:</p>

Objective	Request
	<pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:l="http://www.hp.com/dma/sop/location"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T17:24:48Z&lt;/updated&gt;   &lt;title&gt;Workflows&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cfda a7aa9113f&lt;/id&gt;     &lt;published&gt;2013-02-21T16:51:13Z&lt;/published&gt;     &lt;updated&gt;2013-02-21T16:51:13Z&lt;/updated&gt;     &lt;title&gt;Add or Alter an ASM Diskgroup&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda9fa013cf daa7aa9113f' /&gt;     &lt;sop:workflow name='Add or Alter an ASM Diskgroup' type='Oracle' target- level='Instance' locked='true'&gt;       &lt;sop:permissions/&gt;       &lt;sop:action-ref name='Prepare Oracle Call Wrapper' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda8827 50482'&gt;         &lt;sop:node order='1' next='2,3'&gt;           &lt;l:location ypos='-5' xpos='187'&gt;             &lt;l:connection to='1' source='Point(1, 2)' target='Point (1,0)' /&gt;             &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)' /&gt;           &lt;/l:location&gt;         &lt;/sop:node&gt; </pre>

Objective	Request
	<pre> &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Add or Alter an ASM Diskgroup' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa38560742'&gt;   &lt;sop:node order='2' next='3,4' rc='0'&gt;     &lt;l:location ypos='79' xpos='181'&gt;       &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)'/&gt;       &lt;l:connection to='3' source='Point(1, 2)' target='Point (1,0)'/&gt;     &lt;/l:location&gt;     &lt;sop:mapping input='Add or Alter an ASM Diskgroup.Call Wrapper' output='Prepare Oracle Call Wrapper.Instance Wrapper'/&gt;   &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafaled6c7bf5ad'&gt;   &lt;sop:node order='3'&gt;     &lt;l:location ypos='34' xpos='547'/&gt;   &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Ensure all diskgroups are mounted' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa3e5f07f7'&gt;   &lt;sop:node order='4' next='5,3' rc='0'&gt;     &lt;l:location ypos='148' xpos='170'&gt;       &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)'/&gt;       &lt;l:connection to='4' source='Point(1, 2)' target='Point (1,0)'/&gt;     &lt;/l:location&gt;     &lt;sop:mapping input='Ensure all diskgroups are mounted.ASM Disk Group' output='Add or Alter an ASM Diskgroup.ASM Disk Group'/&gt;     &lt;sop:mapping input='Ensure all diskgroups are mounted.Call Wrapper' output='Prepare Oracle Call Wrapper.Instance Wrapper'/&gt;     &lt;sop:mapping input='Ensure all diskgroups are mounted.ASM Home' output='Add or Alter an ASM Diskgroup.ASM Home'/&gt;   &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616f2246'&gt;   &lt;sop:node order='5' rc='0'&gt; </pre>

Objective	Request
<p>Get a specific workflow by name</p>	<p>GET <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow?name=&lt;workflow name&gt;</code></p> <p><b>Example:</b></p> <p>GET <code>https://DMA1.mycompany.com:8443/dma/api/auto/workflow?name=Add%20or%20Alter%20an%20ASM%20Diskgroup</code></p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:l="http://www.hp.com/dma/sop/location"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T17:28:40Z&lt;/updated&gt;   &lt;title&gt;Workflows&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cfda a7aa9113f&lt;/id&gt;   &lt;published&gt;2013-02-21T16:51:13Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:51:13Z&lt;/updated&gt;   &lt;title&gt;Add or Alter an ASM Diskgroup&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda9fa013cf daa7aa9113f' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda9fa013cf daa7aa9113f' /&gt;   &lt;sop:workflow name='Add or Alter an ASM Diskgroup' type='Oracle' target- level='Instance' locked='true'&gt;     &lt;sop:permissions/&gt;     &lt;sop:action-ref name='Prepare Oracle Call Wrapper'</pre>



Objective	Request
	<pre> id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda882750482'&gt;     &lt;sop:node order='1' next='2,3'&gt;         &lt;l:location ypos='-5' xpos='187'&gt;             &lt;l:connection to='1' source='Point(1, 2)' target='Point (1,0)'/&gt;             &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)'/&gt;         &lt;/l:location&gt;     &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Add or Alter an ASM Diskgroup' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa38560742'&gt;     &lt;sop:node order='2' next='4,3' rc='0'&gt;         &lt;l:location ypos='79' xpos='181'&gt;             &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)'/&gt;             &lt;l:connection to='3' source='Point(1, 2)' target='Point (1,0)'/&gt;         &lt;/l:location&gt;         &lt;sop:mapping input='Add or Alter an ASM Diskgroup.Call Wrapper' output='Prepare Oracle Call Wrapper.Instance Wrapper'/&gt;     &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7bf5ad'&gt;     &lt;sop:node order='3'&gt;         &lt;l:location ypos='34' xpos='547'/&gt;     &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Ensure all diskgroups are mounted' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa3e5f07f7'&gt;     &lt;sop:node order='4' next='5,3' rc='0'&gt;         &lt;l:location ypos='148' xpos='170'&gt;             &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)'/&gt;             &lt;l:connection to='4' source='Point(1, 2)' target='Point (1,0)'/&gt;         &lt;/l:location&gt;         &lt;sop:mapping input='Ensure all diskgroups are mounted.Call Wrapper' output='Prepare Oracle Call Wrapper.Instance Wrapper'/&gt; </pre>

Objective	Request
	<p>h1. Additional Documentation</p> <p>Additional information, including the _HP Database and Middleware Automation Support Matrix_ and solution pack user guides, are available via HP Live Network:</p> <p>"http://hpln.hp.com/group/database-and-middleware-automation":http://hpln.hp.com/group/database-and-middleware-automation</p> <p>To access the documentation, click the OTHER FILES link and enter your HP Passport credentials.</p> <pre> &lt;/sop:documentation&gt; &lt;/sop:workflow&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a specific workflow by name</p> <p><i>NOTE:</i> This example gets a workflow that has two deployments—see the</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow?name=&lt;workflow name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/workflow?name=Copy%of%20Discovery</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:l="http://www.hp.com/dma/sop/location"&gt; </pre>

Objective	Request
<p>used by links.</p>	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow&lt;/id&gt; &lt;author&gt;   &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-21T20:52:16Z&lt;/updated&gt; &lt;title&gt;Workflows&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow' /&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfe84d913152a&lt;/id&gt;   &lt;published&gt;2013-02-21T20:49:44Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T20:49:44Z&lt;/updated&gt;   &lt;title&gt;Copy of Discovery&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfe84d913152a' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfe84d913152a' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda1b2013cfe84d913152a' /&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cfe860297159d' title='Discovery_east' /&gt;   &lt;link rel='usedby' type='application/atom+xml' </pre>

Objective	Request
	<pre> name='Copy of Discovery' type='OS' target-level='Server' locked='false'&gt;   &lt;sop:permissions&gt;     &lt;sop:permission name='DMA Users' read='true' /&gt;     &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;   &lt;/sop:permissions&gt;   &lt;sop:action-ref name='Discovery Parameters' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda946013cfda95c6 d015c'&gt;     &lt;sop:node order='1' next='7,5,4,3,2,6'&gt;       &lt;l:location ypos='-3' xpos='5'&gt;         &lt;l:connection to='2' source='Point(1, 2)' target='Point (1,0)' /&gt;         &lt;l:connection to='3' source='Point(1, 2)' target='Point (1,0)' /&gt;         &lt;l:connection to='4' source='Point(1, 2)' target='Point (1,0)' /&gt;         &lt;l:connection to='5' source='Point(1, 2)' target='Point (1,0)' /&gt;         &lt;l:connection to='6' source='Point(1, 2)' target='Point (1,0)' /&gt;         &lt;l:connection to='7' source='Point(1, 2)' target='Point (1,0)' /&gt;       &lt;/l:location&gt;     &lt;/sop:node&gt;   &lt;/sop:action-ref&gt;   &lt;sop:action-ref name='Discover WebSphere' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda946013cfda95d8 30173'&gt;     &lt;sop:node order='2' next='9,8' rc='0'&gt;       &lt;l:location ypos='270' xpos='8'&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:mapping input='Discover Oracle Databases.Web Service Password' output='Discovery Parameters.Web Service Password'/&gt;                 &lt;sop:mapping input='Discover Oracle Databases.Trust SSL Certificates' output='Discovery Parameters.Trust SSL Certificates'/&gt;             &lt;/sop:node&gt;         &lt;/sop:action-ref&gt;         &lt;sop:action-ref name='Discover SQL Databases' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda946013cfda95ac f0130'&gt;             &lt;sop:node order='4' next='11,9' rc='0'&gt;                 &lt;l:location ypos='183' xpos='251'&gt;                     &lt;l:connection to='9' source='Point(1, 2)' target='Point (1,0)'/&gt;                     &lt;l:connection to='11' source='Point(1, 2)' target='Point (1,0)'/&gt;                 &lt;/l:location&gt;                 &lt;sop:mapping input='Discover SQL Databases.Web Service URL' output='Discovery Parameters.Web Service URL'/&gt;                 &lt;sop:mapping input='Discover SQL Databases.Web Service User' output='Discovery Parameters.Web Service User'/&gt;                 &lt;sop:mapping input='Discover SQL Databases.Web Service Password' output='Discovery Parameters.Web Service Password'/&gt;                 &lt;sop:mapping input='Discover SQL Databases.Trust SSL Certificates' output='Discovery Parameters.Trust SSL Certificates'/&gt;             &lt;/sop:node&gt;         &lt;/sop:action-ref&gt;         &lt;sop:action-ref name='Discover WebLogic' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda946013cfda9570 900ed'&gt;             &lt;sop:node order='5' next='12,9' rc='0'&gt;                 &lt;l:location ypos='141' xpos='392'&gt;                     &lt;l:connection to='9' source='Point(1, 2)' target='Point (1,0)'/&gt;                     &lt;l:connection to='12' source='Point(1, 2)' target='Point                     </pre>

Objective	Request
	<pre> p:action-ref name='Run Sybase Instance Discovery' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda946013cfda9557 600cb'&gt;     &lt;sop:node order='13' next='7,9' rc='0'&gt;         &lt;l:location ypos='181' xpos='556'&gt;             &lt;l:connection to='7' source='Point(1, 2)' target='Point (1,0)'/&gt;             &lt;l:connection to='9' source='Point(1, 2)' target='Point (1,0)'/&gt;         &lt;/l:location&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Discover Sybase Databases-Web Service Password' output='Discovery Parameters.Web Service Password'/&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.URL' value='DMA.Url'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Servers' value='Server.Name'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Discover Sybase Databases-Web Service User' output='Discovery Parameters.Web Service User'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Workflow' output='Discover Sybase Databases.Sybase Subworkflow'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Instances' output='Discover Sybase Databases.Instances'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Discover Sybase Databases-Trust SSL Certificates' output='Discovery Parameters.Trust SSL Certificates'/'&gt;         &lt;sop:mapping input='Run Sybase Instance Discovery.Discover Sybase Databases-Web Service URL' output='Discovery Parameters.Web Service URL'/'&gt;     &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7 bf5ad'&gt;     &lt;sop:node order='14'&gt;         &lt;l:location ypos='535' xpos='562'/'&gt;     &lt;/sop:node&gt; &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616 f2246'&gt;     &lt;sop:node order='15' rc='0'&gt; </pre>

Objective	Request
<p>Create a new workflow</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow</code></p> <p><b>Example:</b></p> <p>POST <code>https://DMA1.mycompany.com:8443/dma/api/auto/workflow</code></p> <p>Request Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt;   &lt;sop:workflow name='TEST: Ping a Server' type='OS' target-level='Server' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Users' read='true' /&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cbc223d013cbc225d0 e034d'&gt;       &lt;sop:node order='1' next='2,3' /&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616 f2246'&gt;       &lt;sop:node order='2' rc='0' /&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7 bf5ad'&gt;       &lt;sop:node order='3' /&gt;     &lt;/sop:action-ref&gt;     &lt;sop:tags&gt;       &lt;sop:tag&gt;Server&lt;/sop:tag&gt;       &lt;sop:tag&gt;test&lt;/sop:tag&gt;     &lt;/sop:tags&gt;     &lt;sop:documentation&gt;This workflow pings the specified server.&lt;/sop:documentation&gt;   &lt;/sop:workflow&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/sop"</pre>

Objective	Request
	<pre> xmlns:l="http://www.hp.com/dma/sop/location"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfdc f6f86014f&lt;/id&gt;   &lt;published&gt;2013-02-21T17:31:35Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T17:31:35Z&lt;/updated&gt;   &lt;title&gt;TEST: Ping a Server&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;sop:workflow name='TEST: Ping a Server' type='OS' target-level='Server' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;       &lt;sop:permission name='DMA Users' read='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda8796 f0370'&gt;       &lt;sop:node order='1' next='3,2'&gt;         &lt;l:location ypos='0' xpos='0'&gt;           &lt;l:connection to='2' source='Point(1, 2)' target='Point(1,0) ' /&gt;           &lt;l:connection to='3' source='Point(1, 2)' target='Point(1,0) ' /&gt;         &lt;/l:location&gt;       &lt;/sop:node&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616 f2246'&gt;       &lt;sop:node order='2' rc='0'&gt;         &lt;l:location ypos='0' xpos='0' /&gt;       &lt;/sop:node&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7 bf5ad'&gt;       &lt;sop:node order='3'&gt;         &lt;l:location ypos='0' xpos='0' /&gt;       &lt;/sop:node&gt;     &lt;/sop:action-ref&gt;   &lt;/sop:workflow&gt; </pre>



Objective	Request
	<pre>er&lt;/sop:tag&gt;   &lt;sop:tag&gt;test&lt;/sop:tag&gt; &lt;/sop:tags&gt;   &lt;sop:documentation&gt;This workflow pings the specified server.&lt;/sop:documentation&gt;   &lt;/sop:workflow&gt; &lt;/entry&gt;</pre>
<p>Modify an existing workflow</p>	<p>PUT <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow/&lt;id&gt;</code></p> <div style="background-color: #f0f0f0; padding: 5px; margin: 10px 0;"> <p><b>Note:</b> If you plan to modify any steps included in a workflow, be sure to modify the steps before you modify the workflow.</p> </div> <p><b>Example:</b></p> <p>PUT <code>https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfdcf6f86014f</code></p> <p>In this example, the workflow created in the previous example is modified in the following ways:</p> <ul style="list-style-type: none"> <li>• An additional Ping Computer step is added.</li> <li>• The name of the workflow is modified.</li> <li>• The <code>&lt;sop:documentation&gt;</code> element is modified.</li> </ul> <p><b>Request Body:</b></p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt;   &lt;sop:workflow name='TEST: Ping 2 Servers' type='OS' target-level='Server' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Users' read='true'/&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true'/&gt;     &lt;/sop:permissions&gt;     &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cbc223d013cbc225d0e034d'&gt;       &lt;sop:node order='1' next='2,4' /&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cbc223d013cbc225d0e034d'&gt;       &lt;sop:node order='2' rc='0' next='3,4' /&gt;     &lt;/sop:action-ref&gt;     &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616f2246'&gt;       &lt;sop:node order='3' rc='0' /&gt;</pre>

Objective	Request
	<pre> &lt;/sop:action-ref&gt; &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7 bf5ad'&gt;     &lt;sop:node order='4' /&gt; &lt;/sop:action-ref&gt; &lt;sop:tags&gt;     &lt;sop:tag&gt;Server&lt;/sop:tag&gt;     &lt;sop:tag&gt;test&lt;/sop:tag&gt; &lt;/sop:tags&gt; &lt;sop:documentation&gt;This workflow pings two specified servers.&lt;/sop:documentation&gt; &lt;/sop:workflow&gt; &lt;/entry&gt;  Response Body: &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:l="http://www.hp.com/dma/sop/location"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfdc f6f86014f&lt;/id&gt;   &lt;published&gt;2013-02-21T17:31:35Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T17:31:35Z&lt;/updated&gt;   &lt;title&gt;TEST: Ping 2 Servers&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cfda1b2013cf dcf6f86014f' /&gt;   &lt;sop:workflow name='TEST: Ping 2 Servers' type='OS' target-level='Server' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;       &lt;sop:permission name='DMA Users' read='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda8796 f0370'&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:node order='1' next='2,3'&gt;                   &lt;l:location ypos='0' xpos='0'&gt;                     &lt;l:connection to='2' source='Point(1, 2)' target='Point(1,0) '/'&gt;                     &lt;l:connection to='4' source='Point(1, 2)' target='Point(1,0) '/'&gt;                   &lt;/l:location&gt;                 &lt;/sop:node&gt;             &lt;/sop:action-ref&gt;             &lt;sop:action-ref name='Ping Computer' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda8796 f0370'&gt;                 &lt;sop:node order='2' next='4,3' rc='0'&gt;                   &lt;l:location ypos='0' xpos='0'&gt;                     &lt;l:connection to='3' source='Point(1, 2)' target='Point(1,0) '/'&gt;                     &lt;l:connection to='4' source='Point(1, 2)' target='Point(1,0) '/'&gt;                   &lt;/l:location&gt;                 &lt;/sop:node&gt;             &lt;/sop:action-ref&gt;             &lt;sop:action-ref name='Failure' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/df9cb8cc6e5549b19dafa1ed6c7 bf5ad'&gt;                 &lt;sop:node order='3'&gt;                   &lt;l:location ypos='0' xpos='0'/'&gt;                 &lt;/sop:node&gt;             &lt;/sop:action-ref&gt;             &lt;sop:action-ref name='Success' id='https://DMA1.mycompany.com:8443/dma/api/auto/step/04130ddd1fbc4c2ea035ba37616 f2246'&gt;                 &lt;sop:node order='4' rc='0'&gt;                   &lt;l:location ypos='0' xpos='0'/'&gt;                 &lt;/sop:node&gt;             &lt;/sop:action-ref&gt;             &lt;sop:tags&gt;                 &lt;sop:tag&gt;Server&lt;/sop:tag&gt;                 &lt;sop:tag&gt;test&lt;/sop:tag&gt;             &lt;/sop:tags&gt;             &lt;sop:documentation&gt;This workflow pings two specified servers.&lt;/sop:documentation&gt;           &lt;/sop:workflow&gt;         &lt;/entry&gt; </pre>
Delete an	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/workflow/&lt;id&gt;</p> <p><b>Example:</b></p>

Objective	Request
existing workflow	DELETE https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cfdcf6f86014f No response body is returned.

## Steps API

In HPE DMA, a workflow consists of a sequence of steps. Each step performs a very specific task. Steps can be shared among workflows.

The Step API provides a mechanism that enables you to read, create, modify, and delete HPE DMA steps. The capabilities associated with your role determine which Step API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/auto/step By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	step

### Supported HTTP Methods

GET, PUT, POST, DELETE

### Content Type

application/atom+xml

### Permissions and Constraints

- Any user can read (GET) or create (POST) a step.
- Only users who have WRITE permission for a step can modify (PUT) or DELETE that step.
- All steps must specify at least one role with WRITE access.
- Locked steps cannot be modified or deleted. Steps cannot be locked or unlocked through the Step API.

- Step names and parameter names must contain one or more characters, and they cannot contain periods (.) or backslashes (\).
- Step names must be unique.
- Input parameter names must be unique within a step. Output parameter names must also be unique within a step. Input parameters and output parameters can have the same name.
- Steps must contain the appropriate content. For example, the `<code>` element must be specified for Script type steps.
- The step type cannot be modified (for example: a Script step cannot be changed to an Email step).
- The user displayed in the step history will be the user who created or updated the step. This information is not derived from the XML request body.
- Steps that are used by one or more workflows cannot be deleted.
- The Success and Failure steps cannot be created, modified, or deleted through the Step API.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the step to GET. Steps must have non-empty unique names when they are created or modified.  Example: Active%20Transaction%20Check

## Object Identifier

When you want to modify (PUT) or DELETE a step, you must specify the object ID for that step in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/auto/step/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT or DELETE	Unique alpha-numeric identifier of the step  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request

Code	Meaning
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all steps	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/step</p> <p>Response Body (only the first two entries are shown here):</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:43:40Z&lt;/updated&gt;   &lt;title&gt;Steps&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step' /&gt;   &lt;entry&gt;</pre>

Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfdaec4013cfdae8c505c1&lt;/id&gt;   &lt;published&gt;2013-02-21T18:43:40Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T18:43:38Z&lt;/updated&gt;   &lt;title&gt;Active Transaction Check&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfdaec4013cfdae8c505c1' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfdaec4013cfdae8c505c1' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfdaec4013cfdae8c505c1' /&gt;   &lt;sop:action name='Active Transaction Check' resource='Oracle' type='script' locked='true' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa24ae0501&lt;/id&gt;   &lt;published&gt;2013-02-21T18:43:40Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T18:43:38Z&lt;/updated&gt;   &lt;title&gt;Add ASM Home To New Node&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa24ae0501' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda9fa013cfdaa24ae0501' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfda9fa013cfdaa24ae0501' /&gt;   &lt;sop:action name='Add ASM Home To New Node' resource='OS' type='script' locked='true' /&gt; &lt;/entry&gt;  ... only the first two entries are shown here </pre>
<p>Get specific</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2</p> <p>Response Body:</p>

Objective	Request
<p>                     p                      by                      ID                 </p>	<pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:52:33Z&lt;/updated&gt;   &lt;title&gt;Steps&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2&lt;/id&gt;   &lt;published&gt;2013-02-21T18:52:33Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T18:52:33Z&lt;/updated&gt;   &lt;title&gt;Check File Download&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda85b013cfd a8a77e0b68' title='Apply Oracle CRS Patchset' /&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec4013cfd afaab41e04' title='Provision Oracle Client' /&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdacec013cfd ad02ad00ea' title='WebLogic: Deploy Code' /&gt;   &lt;sop:action name='Check File Download' resource='OS' type='script' locked='true'&gt;     &lt;sop:description&gt;Purpose: Check for the existence of a file before downloading from Expert Engine.                     </pre>



Objective	Request
	<p>- Check if file is in the expected place.</p> <p>- If file is not in the expected location, output data for file download.</p> <p>    ** Note that the "Target Directory" parameter is set to the directory of the first file in the list not found. **</p> <p>Input:</p> <p>    File List = List of comma separated fully qualified pathnames to check.</p> <p>            Example: /tmp/File1.txt,/opt/dma/joe,/u01/data.txt</p> <p>Output:</p> <p>    Present List = Comma separated list of files found.</p> <p>    Download List = Comma separated list of files not found.</p> <p>    Target Directory = The directory name of the first file not found.</p> <p>    File List = List of comma separated fully qualified pathnames checked.</p> <p>Return Code:</p> <p>    0 = All files found on the system.</p> <p>    1 = Error checking files.</p> <p>    9 = One or more files not found.&lt;/sop:description&gt;</p> <pre> &lt;sop:permissions/&gt; &lt;sop:param name='File List' direction='input' default='/tmp/test1.txt,/tmp/test2.txt' datatype='text'&gt; &lt;sop:description&gt;List of comma separated fully qualified pathnames to check.&lt;/sop:description&gt; &lt;/sop:param&gt; &lt;sop:param name='Download List' direction='output' default='' datatype='text'&gt; &lt;sop:description&gt;Comma separated list of files not found.&lt;/sop:description&gt; &lt;/sop:param&gt; &lt;sop:param name='File List' direction='output' default='' datatype='text'&gt; &lt;sop:description&gt;List of comma separated fully qualified pathnames checked.&lt;/sop:description&gt; &lt;/sop:param&gt; &lt;sop:param name='Present List' direction='output' default='' datatype='text'&gt; &lt;sop:description&gt;Comma separated list of files found.&lt;/sop:description&gt; &lt;/sop:param&gt; &lt;sop:param name='Target Directory' direction='output' default='' datatype='text'&gt; &lt;sop:description&gt;The directory name of the first file not found.&lt;/sop:description&gt; &lt;/sop:param&gt; </pre>

Objective	Request
<p>Get specific step by name</p>	<p>GET <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step?name=&lt;step name&gt;</code></p> <p><b>Example:</b></p> <p>GET <code>https://DMA1.mycompany.com:8443/dma/api/auto/step?name=Check%20File%20Download</code></p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:54:25Z&lt;/updated&gt;   &lt;title&gt;Steps&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2&lt;/id&gt;   &lt;published&gt;2013-02-21T18:54:25Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T18:54:25Z&lt;/updated&gt;   &lt;title&gt;Check File Download&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfda85b013cfda88aee05a2' /&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda85b013cfda8a77e0b68' title='Apply Oracle CRS Patchset' /&gt;   &lt;link rel='usedby' type='application/atom+xml'</pre>

Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec4013cfd afaab41e04' title='Provision Oracle Client'/&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec013cfd ad02ad00ea' title='WebLogic: Deploy Code'/&gt;   &lt;sop:action name='Check File Download' resource='OS' type='script' locked='true'&gt;   &lt;sop:description&gt;Purpose: Check for the existence of a file before downloading from Expert Engine. - Check if file is in the expected place. - If file is not in the expected location, output data for file download.   ** Note that the "Target Directory" parameter is set to the directory of the first file in the list not found. ** Input:   File List = List of comma separated fully qualified pathnames to check.               Example: /tmp/File1.txt,/opt/dma/joe,/u01/data.txt Output:   Present List      = Comma separated list of files found.   Download List     = Comma separated list of files not found.   Target Directory = The directory name of the first file not found.   File List         = List of comma separated fully qualified pathnames checked. Return Code:   0 = All files found on the system.   1 = Error checking files.   9 = One or more files not found.&lt;/sop:description&gt;   &lt;sop:permissions/&gt;   &lt;sop:param name='File List' direction='input' default='/tmp/test1.txt,/tmp/test2.txt' datatype='text'&gt;   &lt;sop:description&gt;List of comma separated fully qualified pathnames to check.&lt;/sop:description&gt;   &lt;/sop:param&gt;   &lt;sop:param name='Download List' direction='output' default='' datatype='text'&gt;   &lt;sop:description&gt;Comma separated list of files not found.&lt;/sop:description&gt;   &lt;/sop:param&gt;   &lt;sop:param name='File List' direction='output' default='' datatype='text'&gt;   &lt;sop:description&gt;List of comma separated fully qualified pathnames checked.&lt;/sop:description&gt;   &lt;/sop:param&gt;   &lt;sop:param name='Present List' direction='output' default='' </pre>

Objective	Request
	<pre> dirname(file)     printHeader() except StandardError, msg:     print "Error in syntax checking list of files"     sys.stderr.write(str(msg[0]) + '\n')     sys.exit(1) else:     if DownloadList:         sys.exit(9)&lt;/sop:code&gt;         &lt;sop:call-wrapper&gt;jython&lt;/sop:call-wrapper&gt;         &lt;sop:version&gt;9.1.23&lt;/sop:version&gt;         &lt;sop:comment&gt;Installed with HPE DMA Database Provisioning Solution Pack (v10.01)&lt;/sop:comment&gt;         &lt;sop:personID&gt;opsware&lt;/sop:personID&gt;         &lt;/sop:action-data&gt;         &lt;sop:tags&gt;         &lt;sop:tag&gt;check&lt;/sop:tag&gt;         &lt;sop:tag&gt;download&lt;/sop:tag&gt;         &lt;sop:tag&gt;file&lt;/sop:tag&gt;         &lt;/sop:tags&gt;         &lt;/sop:action&gt;     &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Create a new step</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step</p> <p><b>Example:</b></p> <p>POST https://DMA1.mycompany.com:8443/dma/api/auto/step</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt;   &lt;sop:action name='TEST: Print User Specified Message' resource='OS' type='script'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' write='true' /&gt;       &lt;sop:permission name='DMA Users' write='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:param name='Message To Print' direction='input' default='Your message here' datatype='text'&gt;       &lt;sop:description&gt;Message that will be printed to the step log&lt;/sop:description&gt;     &lt;/sop:param&gt;     &lt;sop:action-data&gt;     &lt;sop:code&gt;import os, sys </pre>

Objective	Request
	<pre> # # Main Routine # try:     print '\${Message To Print}' except Exception, msg:     print "Error while trying to print user-specified message"     sys.stderr.write(str(msg[0])+'\n')     sys.exit(1) else:     sys.exit(0)&lt;/sop:code&gt; &lt;sop:call-wrapper&gt;jython&lt;/sop:call-wrapper&gt; &lt;sop:version&gt;1.0&lt;/sop:version&gt; &lt;sop:comment&gt;&lt;/sop:comment&gt; &lt;sop:personID&gt;autotest&lt;/sop:personID&gt; &lt;/sop:action-data&gt; &lt;sop:tags&gt;   &lt;sop:tag&gt;OS&lt;/sop:tag&gt; &lt;/sop:tags&gt; &lt;/sop:action&gt; &lt;/entry&gt; </pre> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed&lt;/id&gt;   &lt;published&gt;2013-02-21T19:01:57Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T19:01:57Z&lt;/updated&gt;   &lt;title&gt;TEST: Print User Specified Message&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;sop:action name='TEST: Print User Specified Message' resource='OS' type='script' locked='false'&gt;     &lt;sop:permissions&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:permission name='DMA Users' write='true'/&gt;                 &lt;sop:permission name='DMA Admins' write='true'/&gt;             &lt;/sop:permissions&gt;             &lt;sop:param name='Message To Print' direction='input' default='Your message here' datatype='text'&gt;                 &lt;sop:description&gt;Message that will be printed to the step log&lt;/sop:description&gt;             &lt;/sop:param&gt;             &lt;sop:action-data&gt;                 &lt;sop:code&gt;import os, sys                 #                 # Main Routine                 #                 try:                     print '\${Message To Print}'                 except Exception, msg:                     print "Error while trying to print user-specified message"                     sys.stderr.write(str(msg[0])+'\n')                     sys.exit(1)                 else:                     sys.exit(0)&lt;/sop:code&gt;                 &lt;sop:call-wrapper&gt;jython&lt;/sop:call-wrapper&gt;                 &lt;sop:version&gt;1.0&lt;/sop:version&gt;                 &lt;sop:comment&gt;&lt;/sop:comment&gt;                 &lt;sop:personID&gt;autotest&lt;/sop:personID&gt;             &lt;/sop:action-data&gt;             &lt;sop:tags&gt;                 &lt;sop:tag&gt;OS&lt;/sop:tag&gt;             &lt;/sop:tags&gt;         &lt;/sop:action&gt;     &lt;/entry&gt; </pre>
<p>Modify an existing step</p>	<p>PUT <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step/&lt;id&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step/&lt;id&gt;</a></p> <p><b>Example:</b></p> <p>PUT <a href="https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed">https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed</a></p> <p>This example modifies the WRITE permission for the step created in the previous example.</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt;     &lt;sop:action name='TEST: Print User Specified Message' resource='OS' type='script'&gt;         &lt;sop:permissions&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:permission name='DMA Admins' write='true'/&gt;                 &lt;sop:permission name='DMA Users' write='false'/&gt;             &lt;/sop:permissions&gt;             &lt;sop:param name='Message To Print' direction='input' default='Your message here' datatype='text'&gt;                 &lt;sop:description&gt;Message that will be printed to the step log&lt;/sop:description&gt;             &lt;/sop:param&gt;             &lt;sop:action-data&gt;             &lt;sop:code&gt;import os, sys                 #                 # Main Routine                 #                 try:                     print '\${Message To Print}'                 except Exception, msg:                     print "Error while trying to print user-specified message"                     sys.stderr.write(str(msg[0])+'\n')                     sys.exit(1)                 else:                     sys.exit(0)&lt;/sop:code&gt;             &lt;sop:call-wrapper&gt;jython&lt;/sop:call-wrapper&gt;             &lt;sop:version&gt;1.0&lt;/sop:version&gt;             &lt;sop:comment&gt;&lt;/sop:comment&gt;             &lt;sop:personID&gt;autotest&lt;/sop:personID&gt;             &lt;/sop:action-data&gt;             &lt;sop:tags&gt;                 &lt;sop:tag&gt;OS&lt;/sop:tag&gt;             &lt;/sop:tags&gt;             &lt;/sop:action&gt;         &lt;/entry&gt;  <b>Response Body:</b>          &lt;entry             xmlns="http://www.w3.org/2005/Atom"             xmlns:sop="http://www.hp.com/dma/api/sop"&gt;          &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe222868 07ed&lt;/id&gt;             &lt;published&gt;2013-02-21T19:04:25Z&lt;/published&gt;             &lt;updated&gt;2013-02-21T19:04:25Z&lt;/updated&gt;             &lt;title&gt;TEST: Print User Specified Message&lt;/title&gt;             &lt;link rel='self' type='application/atom+xml' </pre>

Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813cfda1b2013cfe22286807ed' /&gt;   &lt;sop:action name='TEST: Print User Specified Message' resource='OS' type='script' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' write='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:param name='Message To Print' direction='input' default='Your message here' datatype='text'&gt;       &lt;sop:description&gt;Message that will be printed to the step log&lt;/sop:description&gt;     &lt;/sop:param&gt;     &lt;sop:action-data&gt;       &lt;sop:code&gt;import os, sys # # Main Routine # try:   print '\${Message To Print}' except Exception, msg:   print "Error while trying to print user-specified message"   sys.stderr.write(str(msg[0])+'\\n')   sys.exit(1) else:   sys.exit(0)&lt;/sop:code&gt;   &lt;sop:call-wrapper&gt;jython&lt;/sop:call-wrapper&gt;   &lt;sop:version&gt;1.0&lt;/sop:version&gt;   &lt;sop:comment&gt;&lt;/sop:comment&gt;   &lt;sop:personID&gt;autotest&lt;/sop:personID&gt; &lt;/sop:action-data&gt; &lt;sop:tags&gt;   &lt;sop:tag&gt;OS&lt;/sop:tag&gt; &lt;/sop:tags&gt; &lt;/sop:action&gt; &lt;/entry&gt; </pre>
Delete an	<p>DELETE <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step/&lt;id&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/step/&lt;id&gt;</a></p> <p><b>Example:</b></p> <p>DELETE <a href="https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe2228680">https://DMA1.mycompany.com:8443/dma/api/auto/step/ff8080813cfda1b2013cfe2228680</a></p>



Objective	Request
existing step	<p>7ed</p> <p>No response body is returned.</p>

## Functions API

Functions are reusable pieces of code that can be included in automation steps.

The Function API provides a mechanism that enables you to read, create, modify and delete HPE DMA functions. The capabilities associated with your role determine which Function API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	<p><code>https://&lt;DMAServer&gt;:&lt;port&gt;/dma/api/auto/function</code></p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	function

### Supported HTTP Methods

GET, PUT, POST, DELETE

### Content Type

application/atom+xml

### Permissions and Constraints

- Any HPE DMA user can read (GET) all functions.
- Only users who have a role with Administrator or Workflow Creator capability can create (POST), modify (PUT), or delete (DELETE) functions.
- Locked functions cannot be modified. Functions included in an HPE DMA solution pack are locked. You cannot unlock a function. You can, however, make a modifiable copy of a locked function.

- Functions that are used by a step cannot be deleted via the API.
- To create or modify a function, you must specify the function's name in the request body. There is no restriction on the characters in the name.
- To create or modify a function, you must specify a code body in the request body. The `<code>` element cannot be empty.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the function to GET. Functions must have non-empty unique names when they are created or modified.  Example: dmatools

## Object Identifier

When you want to modify (PUT) or DELETE a function, you must specify the object ID for that function in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/auto/function/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT or DELETE  not valid for POST	Unique alpha-numeric identifier of the function  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_	The PUT, POST, or DELETE could not be completed, because the user does not

Code	Meaning
FORBIDDEN	have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all functions	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/function</p> <p>Response Body (only the first two entries are shown here):</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T19:31:54Z&lt;/updated&gt;   &lt;title&gt;Functions&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8a9d30bfc&lt;/id&gt;     &lt;published&gt;2013-02-21T19:31:54Z&lt;/published&gt;     &lt;updated&gt;2013-02-21T16:59:04Z&lt;/updated&gt;     &lt;title&gt;commonvalidation&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8a9d30bfc' /&gt; </pre>

Objective	Request
	<pre> &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cf da8a9d30bfc' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfda85b013cf da8a9d30bfc' /&gt; &lt;sop:function name='commonvalidation' locked='true' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfdad3a013cfda d684e0620&lt;/id&gt; &lt;published&gt;2013-02-21T19:31:54Z&lt;/published&gt; &lt;updated&gt;2013-02-21T16:54:25Z&lt;/updated&gt; &lt;title&gt;compliancetools&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfdad3a013cf dad684e0620' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfdad3a013cf dad684e0620' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfdad3a013cf dad684e0620' /&gt; &lt;sop:function name='compliancetools' locked='true' /&gt; &lt;/entry&gt;  ... <i>only the first two entries are shown here</i> </pre>
<p>Get a specific function by ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function&lt;/id&gt;   &lt;author&gt; </pre>

Objective	Request
	<pre> &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-21T19:35:20Z&lt;/updated&gt; &lt;title&gt;Functions&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function'/&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e&lt;/id&gt; &lt;published&gt;2013-02-21T19:35:20Z&lt;/published&gt; &lt;updated&gt;2013-02-21T16:59:04Z&lt;/updated&gt; &lt;title&gt;dmatools&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e'/&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e'/&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfda85b013cfda8aba50c4e'/&gt; &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8adce0d13' title='ostools'/&gt; &lt;sop:function name='dmatools' locked='true'&gt;   &lt;sop:description&gt;This module provides functions to help determine the execution platform type and version:  1) get_platform_name() 2) get_dma_version()&lt;/sop:description&gt;   &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables as dma_vars import steplog  def get_platform_name():     """     Get the platform string name. 'sa' for Server Automation, 'standalone'     for dmaette or 'agnostic' for anything greater than 9.x     """     dma_platform = "standalone" </pre>

Objective	Request
	<pre> _version.split('.') steplog.debug("DMA ver list: %s" % ver_list) if bool(re.search('^\d+\$', ver_list[0])):     if int(ver_list[0]) &gt;= 9:         if int(ver_list[0]) == 9:             if int(ver_list[1]) &gt;= 10:                 dma_platform = "sa"         else:             dma_platform = "agnostic"      return dma_platform  def get_dma_version():     """ Get the DMA version number string """     dma_version = None      # If DMA Version expands, return it; else return None     if not dma_vars.dma_version.startswith('\${DMA.Version}'):         dma_version = dma_vars.dma_version     return dma_version </pre> <p>&lt;/sop:tags&gt;  &lt;sop:tag&gt;python&lt;/sop:tag&gt;  &lt;sop:tag&gt;query&lt;/sop:tag&gt;  &lt;/sop:tags&gt;  &lt;/sop:function&gt;  &lt;/entry&gt;  &lt;/feed&gt;</p>
<p>Get a specific function by name</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function?name=&lt;function name&gt;</p> <p><b>Example:</b>  GET https://DMA1.mycompany.com:8443/dma/api/auto/function?name=dmatools</p> <p><b>Response Body:</b></p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt; </pre>

Objective	Request
	<pre> &lt;updated&gt;2013-02-21T19:32:54Z&lt;/updated&gt; &lt;title&gt;Functions&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function'/&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e&lt;/id&gt;   &lt;published&gt;2013-02-21T19:32:54Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:59:04Z&lt;/updated&gt;   &lt;title&gt;dmatools&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8aba50c4e'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfda85b013cfda8aba50c4e'/&gt;   &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda85b013cfda8adce0d13' title='ostools'/&gt;   &lt;sop:function name='dmatools' locked='true'&gt;     &lt;sop:description&gt;This module provides functions to help determine the execution platform type and version:  1) get_platform_name() 2) get_dma_version()&lt;/sop:description&gt;     &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables as dma_vars import steplog  def get_platform_name():     """     Get the platform string name. 'sa' for Server Automation, 'standalone'     for dmaette or 'agnostic' for anything greater than 9.x     """     dma_platform = "standalone"     dma_version = get_dma_version() </pre>

Objective	Request
	<pre> if bool(re.search('^\d+\$', ver_list[0])):     if int(ver_list[0]) &gt;= 9:         if int(ver_list[0]) == 9:             if int(ver_list[1]) &gt;= 10:                 dma_platform = "sa"             else:                 dma_platform = "agnostic"          return dma_platform  def get_dma_version():     """ Get the DMA version number string """     dma_version = None      # If DMA Version expands, return it; else return None     if not dma_vars.dma_version.startswith('\${DMA.Version}'):         dma_version = dma_vars.dma_version     return dma_version </pre> <p>&lt;/sop:code&gt;  &lt;sop:tags&gt;  &lt;sop:tag&gt;python&lt;/sop:tag&gt;  &lt;sop:tag&gt;query&lt;/sop:tag&gt;  &lt;/sop:tags&gt;  &lt;/sop:function&gt;  &lt;/entry&gt;  &lt;/feed&gt;</p>
<p>Create a new function</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function</p> <p><b>Example:</b>  POST https://DMA1.mycompany.com:8443/dma/api/auto/function</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt; &lt;sop:function name='dma_version_only'&gt; &lt;sop:description&gt;The dma_version_only() function returns the HPE DMA version.&lt;/sop:description&gt; &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables dma_vars = dmapythonvariables import steplog </pre>



Objective	Request
	<pre> def dma_version_only():     """ Get the DMA version number string """     dma_version = None      # If DMA Version expands, return it; else return None     if not dma_vars.dma_version.startswith('\${DMA.Version}'):         dma_version = dma_vars.dma_version     return dma_version </pre> <p>&lt;sop:tags&gt;  &lt;sop:tag&gt;python&lt;/sop:tag&gt;  &lt;sop:tag&gt;query&lt;/sop:tag&gt;  &lt;/sop:tags&gt;  &lt;/sop:function&gt;  &lt;/entry&gt;</p> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4595a90d27&lt;/id&gt;   &lt;published&gt;2013-02-21T19:40:38Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T19:40:38Z&lt;/updated&gt;   &lt;title&gt;dma_version_only&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4595a90d27' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4595a90d27' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfda1b2013cfe4595a90d27' /&gt;   &lt;sop:function name='dma_version_only' locked='false'&gt;     &lt;sop:description&gt;The dma_version_only() function returns the HPE DMA version.&lt;/sop:description&gt;     &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables dma_vars = dmapythonvariables import steplog  def dma_version_only(): </pre>

Objective	Request
	<pre> """ Get the DMA version number string """ dma_version = None  # If DMA Version expands, return it; else return None if not dma_vars.dma_version.startswith('\${DMA.Version}'):     dma_version = dma_vars.dma_version return dma_version&lt;/sop:code&gt; &lt;sop:tags&gt;   &lt;sop:tag&gt;python&lt;/sop:tag&gt;   &lt;sop:tag&gt;query&lt;/sop:tag&gt; &lt;/sop:tags&gt; &lt;/sop:function&gt; &lt;/entry&gt; </pre>
<p>Modify an existing function</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4595a90d27</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto"&gt; &lt;sop:function name='dma_version_only'&gt; &lt;sop:description&gt;The dma_version_only() function returns the HPE DMA version. This file has an additional line in the description.&lt;/sop:description&gt; &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables dma_vars = dmapythonvariables import steplog  def dma_version_only():     """ Get the DMA version number string """     dma_version = None      # If DMA Version expands, return it; else return None     if not dma_vars.dma_version.startswith('\${DMA.Version}'):         dma_version = dma_vars.dma_version     return dma_version&lt;/sop:code&gt; &lt;sop:tags&gt; &lt;sop:tag&gt;python&lt;/sop:tag&gt; &lt;sop:tag&gt;query&lt;/sop:tag&gt; &lt;/sop:tags&gt; &lt;/sop:function&gt; </pre>

Objective	Request
	<pre> &lt;/entry&gt;  Response Body:  &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4 595a90d27&lt;/id&gt;   &lt;published&gt;2013-02-21T19:42:17Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T19:40:38Z&lt;/updated&gt;   &lt;title&gt;dma_version_only&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cf e4595a90d27'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cf e4595a90d27'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/function/view/ff8080813cfda1b2013cf e4595a90d27'/&gt;   &lt;sop:function name='dma_version_only' locked='false'&gt;     &lt;sop:description&gt;The dma_version_only() function returns the HPE DMA version.     This version of the step has an additional line in the description.&lt;/sop:description&gt;     &lt;sop:code&gt;import re  # DMA Imports #import dmapythonvariables as dma_vars import dmapythonvariables dma_vars = dmapythonvariables import steplog  def dma_version_only():     """ Get the DMA version number string """     dma_version = None      # If DMA Version expands, return it; else return None     if not dma_vars.dma_version.startswith('\${DMA.Version}'):         dma_version = dma_vars.dma_version     return dma_version&lt;/sop:code&gt;   &lt;sop:tags&gt;     &lt;sop:tag&gt;python&lt;/sop:tag&gt;     &lt;sop:tag&gt;query&lt;/sop:tag&gt;   &lt;/sop:tags&gt; </pre>

Objective	Request
	<pre>&lt;/sop:function&gt; &lt;/entry&gt;</pre>
Deleting function	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/function/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/auto/function/ff8080813cfda1b2013cfe4595a90d27</p> <p>No response body is returned.</p>

## Deployments API

In HPE DMA, a deployment associates a workflow with a target environment in which the workflow runs.

The Deployment API provides a mechanism that enables you to read, create, modify, and delete HPE DMA deployments. The capabilities associated with your role determine which Deployment API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/auto/deployment</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	deployment

### Supported HTTP Methods

GET, PUT, POST, DELETE

### Content Type

application/atom+xml

## Permissions and Constraints

- A deployment can only be viewed (GET) by users who have READ permission for the deployment.
- A deployment can only be created (POST) by users who have the following permissions:
  - READ permission for the pertinent workflow
  - Both READ and DEPLOY permission for the organizations in which all specified targets reside
- A deployment can only be modified (PUT) by users who have READ and WRITE permission for that deployment.
- Deployments must have names.
- Deployment names must be unique for the specified workflow.
- Targets must meet the following criteria:
  - Each target must specify either a Smart Group or a server (but not both).
  - Targets can only specify an instance if they specify a server.
  - Targets can only specify a database if they specify an instance.
  - Targets must be unique.
  - Smart Groups, servers, instances, and databases specified as targets must exist.
  - To specify a Smart Group, the user specified in the PUT or POST must have the role that is associated with the Smart Group.
- A deployment can only be deleted by a user who has a role with Administrator capability or a user who has READ and WRITE permissions for that deployment.
- Only those input parameters that are marked - User Selected - in the workflow can be specified in a PUT or POST.
- Any Custom Field or policy attribute used to specify a value for an input parameter must exist. Note that input parameters that reference a password are always displayed as "\*\*\*\*" in the Response Body.
- For a PUT, an input parameter value containing only asterisks (\*\*\*) will be ignored, and the previous value of the parameter will be kept. Any other value specified will overwrite the previous value.
- Only deployments that have no "Runtime" parameters can be scheduled.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the deployment to GET. Deployments must have non-empty unique names when they are created or modified.  Example: North%20America%20Servers:%20Apply%20CRS%20Patchset%20to%20Home
<b>workflow</b>	optional for GET  not valid	Name of the workflow associated with the deployment to GET. If you have multiple deployments with the same name (that deploy different workflows), you must specify this parameter—otherwise, the API will return the first deployment that it

Name	Required	Description
	for PUT, POST, DELETE	finds with that name.  If you specify <b>workflow</b> , you must also specify <b>name</b> .

## Object Identifier

When you want to modify (PUT) or DELETE a deployment, you must specify the object ID for that deployment in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/auto/deployment/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT or DELETE  not valid for POST	Unique alpha-numeric identifier of the deployment  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the query parameters.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_	For a POST, the object cannot be created because an object with the same name

Code	Meaning
CONFLICT	already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all deployments	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/deployment</p> <p>Response Body (only the first two entries are shown here):</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T20:00:56Z&lt;/updated&gt;   &lt;title&gt;Deployments&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment' /&gt;&lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000&lt;/id&gt;     &lt;published&gt;2013-02-21T20:00:56Z&lt;/published&gt;     &lt;updated&gt;2013-02-21T19:22:23Z&lt;/updated&gt;     &lt;title&gt;ProvisionanOracleDatabase_Provision11202_Linux_Oracle_11202_ Latest&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/90cef9233cfe349d013cfe34de1b0000' /&gt;     &lt;link rel='parent' type='application/atom+xml' </pre>

Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec4013cf daf645a159b' title='Provision an Oracle Database' /&gt;   &lt;sop:deployment name='ProvisionanOracleDatabase_Provision11202_Linux_ Oracle_11202_Latest' workflow='Provision an Oracle Database' /&gt;   &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe2653013cf e2691a40000&lt;/id&gt;   &lt;published&gt;2013-02-21T20:00:56Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T19:06:46Z&lt;/updated&gt;   &lt;title&gt;ProvisionOracleSoftware_Provision11202_Linux_Oracle_11202_ Latest&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe2653013 cfe2691a40000' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe2653013 cfe2691a40000' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/90cef9233cfe2653013cfe2 691a40000' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec4013cf daf39a20fdd' title='Provision Oracle Software' /&gt;   &lt;sop:deployment name='ProvisionOracleSoftware_Provision11202_Linux_ Oracle_11202_Latest' workflow='Provision Oracle Software' /&gt;   &lt;/entry&gt;  ... <i>only the first two entries are shown here</i> </pre>
<p>Get a spe cifi c dep loy me nt by ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:env="http://www.hp.com/datapal/api/env"&gt; </pre>



Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment&lt;/id&gt; &lt;author&gt;   &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-21T20:17:30Z&lt;/updated&gt; &lt;title&gt;Deployments&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment' /&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000&lt;/id&gt;   &lt;published&gt;2013-02-21T20:17:30Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T19:22:23Z&lt;/updated&gt;   &lt;title&gt;ProvisionanOracleDatabase_Provision11202_Linux_Oracle_11202_ Latest&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/90cef9233cfe349d013cfe34de1b0000' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/90cef9233cfe349d013cfe34de1b0000' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfdaec4013cfdaf645a159b' title='Provision an Oracle Database' /&gt;   &lt;sop:deployment name='ProvisionanOracleDatabase_Provision11202_Linux_ Oracle_11202_Latest' workflow='Provision an Oracle Database'&gt;     &lt;sop:permissions/&gt;     &lt;sop:deployment-parameters&gt;       &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discover Oracle Databases' runtime='false' type='text'&gt;True&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service Password' step='Discover Oracle Databases' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service URL' step='Discover Oracle Databases' runtime='false' type='text'&gt;https://DMA1.mycompany.com:8443/dma&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service User' step='Discover Oracle Databases' runtime='false' type='text'&gt;autotest&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Database Name' step='Gather Parameters for Provision Oracle Database' runtime='false' </pre>

Objective	Request
	<pre> ision Oracle Database' runtime='false' type='text'&gt;/u01/oradata&lt;/sop:deployment- parameter&gt;         &lt;sop:deployment-parameter name='Oracle Account' step='Gather Parameters for Provision Oracle Database' runtime='false' type='text'&gt;oracle&lt;/sop:deployment-parameter&gt;         &lt;sop:deployment-parameter name='Oracle Base' step='Gather Parameters for Provision Oracle Database' runtime='false' type='text'&gt;/opt/app/oracle/&lt;/sop:deployment-parameter&gt;         &lt;sop:deployment-parameter name='Oracle Home' step='Gather Parameters for Provision Oracle Database' runtime='false' type='text'&gt;/opt/app/oracle/product/11.2.0/DB2&lt;/sop:deployment-parameter&gt;         &lt;/sop:deployment-parameters&gt;         &lt;sop:targets&gt;                 &lt;sop:target server='target1.mycompany.com' /&gt;         &lt;/sop:targets&gt; &lt;/sop:deployment&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a spe cifi c dep loy me nt by na me</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment?name=&lt;deployment name&gt;?workflow=&lt;workflow name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/deployment?name=Test&amp;workflow=Copy%20of%20Discovery</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T21:21:16Z&lt;/updated&gt;   &lt;title&gt;Deployments&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cfe910ac61a75&lt;/id&gt;     &lt;published&gt;2013-02-21T21:21:16Z&lt;/published&gt; </pre>

Objective	Request
	<pre> &lt;updated&gt;2013-02-21T21:03:03Z&lt;/updated&gt; &lt;title&gt;Test&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cfe910ac61a75' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cfe910ac61a75' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/ff8080813cfda1b2013cfe9 10ac61a75' /&gt; &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf e84d913152a' title='Copy of Discovery' /&gt; &lt;sop:deployment name='Test' workflow='Copy of Discovery'&gt;   &lt;sop:permissions&gt;     &lt;sop:permission name='DMA Admins' read='true' write='true' execute='true' /&gt;     &lt;sop:permission name='Viewers' read='true' /&gt;     &lt;sop:permission name='DMA Users' read='true' execute='true' /&gt;   &lt;/sop:permissions&gt;   &lt;sop:deployment-parameters&gt;     &lt;sop:deployment-parameter name='Known BEA Homes' step='Discover WebLogic' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;sop:deployment-parameter name='Known Profile Roots' step='Discover WebSphere' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment- parameter&gt;     &lt;sop:deployment-parameter name='Web Service Password' step='Discovery Parameters' runtime='false' type='text'&gt;***&lt;/sop:deployment- parameter&gt;     &lt;sop:deployment-parameter name='Web Service URL' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;sop:deployment-parameter name='Web Service User' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;sop:deployment-parameter name='Password' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;     &lt;sop:deployment-parameter name='Username' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;   &lt;/sop:deployment-parameters&gt;   &lt;sop:targets&gt;     &lt;sop:target server='target1.mycompany.com' /&gt;   &lt;/sop:targets&gt; &lt;/sop:deployment&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>

Objective	Request
<p>Create a new deployment</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment</p> <p><b>Example:</b></p> <p>POST https://DMA1.mycompany.com:8443/dma/api/auto/deployment</p> <p>Request Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;sop:deployment name='Discovery_East' workflow='Copy of Discovery'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' execute='true'/&gt;       &lt;sop:permission name='DMA Users' read='true' execute='true'/&gt;     &lt;/sop:permissions&gt;     &lt;sop:deployment-parameters&gt;       &lt;sop:deployment-parameter name='Known BEA Homes' step='Discover WebLogic' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Known Profile Roots' step='Discover WebSphere' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service Password' step='Discovery Parameters' runtime='false' type='text'&gt;***&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service URL' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service User' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Password' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Username' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;/sop:deployment-parameters&gt;     &lt;sop:targets&gt;       &lt;sop:target smart-group='East Sector Servers'/&gt;     &lt;/sop:targets&gt;   &lt;/sop:deployment&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"</pre>

Objective	Request
	<pre> xmlns:sop="http://www.hp.com/dma/api/sop" xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cf eb9d4bd1c51&lt;/id&gt;   &lt;published&gt;2013-02-21T21:47:37Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T21:47:36Z&lt;/updated&gt;   &lt;title&gt;Discovery_East&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cfb9d4bd1c51'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cfb9d4bd1c51'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/ff8080813cfda1b2013cfb 9d4bd1c51'/&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf e84d913152a' title='Copy of Discovery'/&gt;   &lt;sop:deployment name='Discovery_East' workflow='Copy of Discovery'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Users' read='true' execute='true'/&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' execute='true'/&gt;     &lt;/sop:permissions&gt;     &lt;sop:deployment-parameters&gt;       &lt;sop:deployment-parameter name='Known BEA Homes' step='Discover WebLogic' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Known Profile Roots' step='Discover WebSphere' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service Password' step='Discovery Parameters' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service URL' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service User' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Password' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Username' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;/sop:deployment-parameters&gt;     &lt;sop:targets&gt; </pre>

Objective	Request
	<pre> r Servers' /&gt;     &lt;/sop:targets&gt;   &lt;/sop:deployment&gt; &lt;/entry&gt; </pre>
<p>Modify an existing deployment</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cf9d4bd1c51</p> <p>This example changes the permissions for the deployment created in the previous example.</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/auto" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;sop:deployment name='Discovery_East' workflow='Copy of Discovery'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' execute='true' /&gt;       &lt;sop:permission name='DMA Users' read='true' execute='true' /&gt;       &lt;sop:permission name='Viewers' read='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:deployment-parameters&gt;       &lt;sop:deployment-parameter name='Known BEA Homes' step='Discover WebLogic' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Known Profile Roots' step='Discover WebSphere' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service Password' step='Discovery Parameters' runtime='false' type='text'&gt;***&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service URL' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service User' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Password' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Username' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;     &lt;/sop:deployment-parameters&gt;     &lt;sop:targets&gt;       &lt;sop:target smart-group='East Sector Servers' /&gt;     &lt;/sop:targets&gt; </pre>

Objective	Request
	<pre> &lt;/sop:deployment&gt; &lt;/entry&gt;  Response Body:  &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cf eb9d4bd1c51&lt;/id&gt;   &lt;published&gt;2013-02-21T21:49:57Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T21:47:36Z&lt;/updated&gt;   &lt;title&gt;Discovery_East&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cf8eb9d4bd1c51' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013 cf8eb9d4bd1c51' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/deploy/view/ff8080813cfda1b2013cf8 eb9d4bd1c51' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/workflow/ff8080813cfda1b2013cf e84d913152a' title='Copy of Discovery' /&gt;   &lt;sop:deployment name='Discovery_East' workflow='Copy of Discovery'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Users' read='true' execute='true' /&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' execute='true' /&gt;       &lt;sop:permission name='Viewers' read='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:deployment-parameters&gt;       &lt;sop:deployment-parameter name='Known BEA Homes' step='Discover WebLogic' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Known Profile Roots' step='Discover WebSphere' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Trust SSL Certificates' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment- parameter&gt;       &lt;sop:deployment-parameter name='Web Service Password' step='Discovery Parameters' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service URL' step='Discovery Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;       &lt;sop:deployment-parameter name='Web Service User' step='Discovery </pre>

Objective	Request
	<pre>Parameters' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt;   &lt;sop:deployment-parameter name='Password' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;***&lt;/sop:deployment-parameter&gt;   &lt;sop:deployment-parameter name='Username' step='Run Sybase Instance Discovery' runtime='false' type='text'&gt;&lt;/sop:deployment-parameter&gt; &lt;/sop:deployment-parameters&gt; &lt;sop:targets&gt;   &lt;sop:target smart-group='East Sector Servers' /&gt; &lt;/sop:targets&gt; &lt;/sop:deployment&gt; &lt;/entry&gt;</pre>
Delete an existing deployment	<p>DELETE <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/deployment/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>DELETE <code>https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813cfda1b2013cfcb9d4bd1c51</code></p> <p>No response body is returned.</p>

## Policies API

Policies are reusable sets of attributes that can be used to specify parameter values in deployments.

The Policy API provides a mechanism that enables you to read, create, modify and delete HPE DMA policies. The capabilities associated with your role determine which policy API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	<code>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/auto/policy</code> By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	policy



## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Any user can create (POST) a policy.
- Only users who have WRITE permission for a policy can modify (PUT) that policy.
- When you create (POST) or modify (PUT) a policy, you must specify at least one role with READ and WRITE permission.
- When a policy is locked, only attribute values can be modified.
- Policy names must be unique.
- Attribute names must be unique within a policy.
- You cannot rename or change the type of existing policy attributes
- Policies that are used by any deployments cannot be deleted.
- Only policy attributes that are not used can be deleted.
- Policies can have zero or more attributes.
- The list of attributes is returned in alphabetical order on a GET. It is not necessary to sort the attributes for a POST or PUT.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the policy to GET  Example: My%20Directories

## Object Identifier

When you want to modify (PUT) or DELETE a policy, you must specify the object ID for that policy in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/auto/policy/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT or DELETE  not valid for POST	Unique alpha-numeric identifier of the policy  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all policies	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/policy</p> <p>Response Body (only the first two entries are shown here):</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"</pre>

Objective	Request
	<pre> xmlns:sop="http://www.hp.com/dma/api/sop"&gt; &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy&lt;/id&gt; &lt;author&gt;   &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-21T22:08:10Z&lt;/updated&gt; &lt;title&gt;Policies&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy' /&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda95 ee101b5&lt;/id&gt;   &lt;published&gt;2013-02-21T16:50:01Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:50:01Z&lt;/updated&gt;   &lt;title&gt;Discovery&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda 95ee101b5' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda 95ee101b5' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfda946013cfda 95ee101b5' /&gt;   &lt;sop:policy name='Discovery' locked='true' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdaec4013cfdaf2 6210d5b&lt;/id&gt;   &lt;published&gt;2013-02-21T16:56:19Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:56:19Z&lt;/updated&gt;   &lt;title&gt;MS SQL: Authentication&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdaec4013cfda f26210d5b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdaec4013cfda f26210d5b' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfdaec4013cfda f26210d5b' /&gt;   &lt;sop:policy name='MS SQL: Authentication' locked='true' /&gt; &lt;/entry&gt; ... </pre>

Objective	Request
	<p><i>only the first two entries are shown here</i></p>
<p>Get a specific policy by ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda95ee101b5</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T22:09:26Z&lt;/updated&gt;   &lt;title&gt;Policies&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda95ee101b5&lt;/id&gt;   &lt;published&gt;2013-02-21T16:50:01Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:50:01Z&lt;/updated&gt;   &lt;title&gt;Discovery&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda95ee101b5' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda946013cfda95ee101b5' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfda946013cfda95ee101b5' /&gt;   &lt;sop:policy name='Discovery' locked='true'&gt;     &lt;sop:permissions/&gt;     &lt;sop:policy-attributes&gt;       &lt;sop:policy-attribute type='Password' name='Web Service Password'&gt;         &lt;sop:value&gt;&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Web Service URL'&gt;         &lt;sop:value&gt;&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Web Service User'&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:value&gt;&lt;/sop:value&gt;             &lt;/sop:policy-attribute&gt;         &lt;/sop:policy-attributes&gt;     &lt;/sop:policy&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a specific policy by name</p>	<p>GET <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy?name=&lt;policy name&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy?name=&lt;policy name&gt;</a></p> <p><b>Example:</b></p> <p>GET <a href="https://DMA1.mycompany.com:8443/dma/api/auto/policy?name=Oracle%20Compliance">https://DMA1.mycompany.com:8443/dma/api/auto/policy?name=Oracle%20Compliance</a></p> <p>Response Body:</p> <pre> feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T22:11:15Z&lt;/updated&gt;   &lt;title&gt;Policies&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdad3a013cfdad5c810351&lt;/id&gt;     &lt;published&gt;2013-02-21T16:54:22Z&lt;/published&gt;     &lt;updated&gt;2013-02-21T16:54:22Z&lt;/updated&gt;     &lt;title&gt;Oracle Compliance&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdad3a013cfdad5c810351' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfdad3a013cfdad5c810351' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfdad3a013cfdad5c810351' /&gt;     &lt;sop:policy name='Oracle Compliance' locked='true'&gt;       &lt;sop:permissions/&gt;       &lt;sop:policy-attributes&gt;         &lt;sop:policy-attribute type='List' name='Excluded Checks'&gt;           &lt;sop:value&gt;&lt;/sop:value&gt;         &lt;/sop:policy-attribute&gt; </pre>

Objective	Request
	<pre>                 &lt;sop:policy-attribute type='List' name='Excluded Repairs'&gt;                     &lt;sop:value&gt;&lt;/sop:value&gt;                 &lt;/sop:policy-attribute&gt;                 &lt;sop:policy-attribute type='List' name='Oracle Mandatory Checks'&gt;                     &lt;sop:value&gt;&lt;/sop:value&gt;                 &lt;/sop:policy-attribute&gt;                 &lt;sop:policy-attribute type='List' name='Oracle Recommended Checks'&gt;                     &lt;sop:value&gt;&lt;/sop:value&gt;                 &lt;/sop:policy-attribute&gt;             &lt;/sop:policy-attributes&gt;         &lt;/sop:policy&gt;     &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Create a new policy</p>	<p>POST <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy</a></p> <p><b>Example:</b></p> <p>POST <a href="https://DMA1.mycompany.com:8443/dma/api/auto/policy">https://DMA1.mycompany.com:8443/dma/api/auto/policy</a></p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/sop" &gt;   &lt;sop:policy name='My Test Directories'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:policy-attributes&gt;       &lt;sop:policy-attribute type='Text' name='Backup Directory'&gt;         &lt;value&gt;/var/dma/backup&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Binary Directory'&gt;         &lt;value&gt;/var/dma/binaries&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Data Directory'&gt;         &lt;value&gt;/var/dma/data&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Log Directory'&gt;         &lt;value&gt;/var/dma/log&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Temp Directory'&gt;         &lt;value&gt;/tmp/dma&lt;/value&gt;       &lt;/sop:policy-attribute&gt;     &lt;/sop:policy-attributes&gt;   &lt;/sop:policy&gt; &lt;/entry&gt; </pre>

Objective	Request
	<p>Response Body:</p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98&lt;/id&gt;   &lt;published&gt;2013-02-21T22:17:55Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T22:17:55Z&lt;/updated&gt;   &lt;title&gt;My Test Directories&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfda1b2013cfed594b51c98' /&gt;   &lt;sop:policy name='My Test Directories' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true' /&gt;     &lt;/sop:permissions&gt;     &lt;sop:policy-attributes&gt;       &lt;sop:policy-attribute type='Text' name='Backup Directory'&gt;         &lt;sop:value&gt;/var/dma/backup&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Binary Directory'&gt;         &lt;sop:value&gt;/var/dma/binaries&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Data Directory'&gt;         &lt;sop:value&gt;/var/dma/data&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Log Directory'&gt;         &lt;sop:value&gt;/var/dma/log&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Temp Directory'&gt;         &lt;sop:value&gt;/tmp/dma&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;     &lt;/sop:policy-attributes&gt;   &lt;/sop:policy&gt; &lt;/entry&gt; </pre>
<p>Modify an</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy/&lt;id&gt;</p> <p><b>Example:</b></p>

Objective	Request
<p>existing policy</p>	<p>PUT <a href="https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98">https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98</a></p> <p>This example grants READ permission to users with the DMA Users role. It makes no other changes to the policy created in the previous example.</p> <p>Request Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:sop="http://www.hp.com/dma/api/sop" &gt;   &lt;sop:policy name='My Test Directories'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true'/&gt;       &lt;sop:permission name='DMA Users' read='true' write='false'/&gt;     &lt;/sop:permissions&gt;     &lt;sop:policy-attributes&gt;       &lt;sop:policy-attribute type='Text' name='Backup Directory'&gt;         &lt;value&gt;/var/dma/backup&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Binary Directory'&gt;         &lt;value&gt;/var/dma/binaries&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Data Directory'&gt;         &lt;value&gt;/var/dma/data&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Log Directory'&gt;         &lt;value&gt;/var/dma/log&lt;/value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Temp Directory'&gt;         &lt;value&gt;/tmp/dma&lt;/value&gt;       &lt;/sop:policy-attribute&gt;     &lt;/sop:policy-attributes&gt;   &lt;/sop:policy&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98&lt;/id&gt;   &lt;published&gt;2013-02-21T22:17:55Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T22:21:32Z&lt;/updated&gt;   &lt;title&gt;My Test Directories&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml'</pre>



Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/policy/view/ff8080813cfda1b2013cfed594b51c98'/&gt;   &lt;sop:policy name='My Test Directories' locked='false'&gt;     &lt;sop:permissions&gt;       &lt;sop:permission name='DMA Admins' read='true' write='true'/&gt;       &lt;sop:permission name='DMA Users' read='true'/&gt;     &lt;/sop:permissions&gt;     &lt;sop:policy-attributes&gt;       &lt;sop:policy-attribute type='Text' name='Backup Directory'&gt;         &lt;sop:value&gt;/var/dma/backup&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Binary Directory'&gt;         &lt;sop:value&gt;/var/dma/binaries&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Data Directory'&gt;         &lt;sop:value&gt;/var/dma/data&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Target Log Directory'&gt;         &lt;sop:value&gt;/var/dma/log&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;       &lt;sop:policy-attribute type='Text' name='Temp Directory'&gt;         &lt;sop:value&gt;/tmp/dma&lt;/sop:value&gt;       &lt;/sop:policy-attribute&gt;     &lt;/sop:policy-attributes&gt;   &lt;/sop:policy&gt; &lt;/entry&gt; </pre>
<p>Delete an existing policy</p>	<p>DELETE <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/policy/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>DELETE <code>https://DMA1.mycompany.com:8443/dma/api/auto/policy/ff8080813cfda1b2013cfed594b51c98</code></p> <p>No response body is returned. The HTTP return code indicates success or failure of the delete request.</p>

## Running Workflows API

The Running API provides a mechanism that enables you to start a workflow, determine which workflows are currently running, or view information about a particular workflow execution. The capabilities associated with

your role and the permissions on the pertinent deployment determine which Running API operations you are permitted to perform (see "[Permissions and Constraints](#)").

When you run a workflow, you can specify parameter values in the URL or in a separate file.

## Resource Information

Resource URLs	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/auto/running</p> <p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;workflow id&gt;</p> <p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;workflow id&gt;/step/&lt;step id&gt;</p> <p>https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/&lt;workflow id&gt;/scriptExecution/&lt;script execution id&gt;</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	auto
Response Object	running

## Supported HTTP Methods

GET, POST

## Content Type

application/atom+xml for GET

application/x-www-form-urlencoded for POST

## Permissions and Constraints

- To view (GET) information about a workflow, you must have one (or both) of the following permissions:
  - READ permission on the organization where the targets reside
  - EXECUTE permission on the deployment
- To run (POST) a workflow, you must have both of the following permissions:
  - READ permission on the organization where the targets reside
  - EXECUTE permission on the deployment
- To run (POST) a workflow without specifying a deployment (for example: the Discovery workflow), you must have a role with Workflow Creator capability and both of the following permissions:
  - READ permission on the workflow
  - DEPLOY permission on the organization

You can also run a workflow without specifying a deployment if you have a role with Administrator capability.

- Users who have a role with Administrator capability can view (GET) any workflow execution or run (POST) any workflow.

## Query Parameters

Name	Required	Description
<b>workflow</b>	required for POST  not valid for GET	Name of the workflow that you want to run.  Example: Clone%20Oracle%20Home
<b>deployment</b>	required for POST  not valid for GET	Name of the deployment that you want to execute.  Example: CloneOracleHome_Clone_Linux_Oracle_11202_Test
<b>server</b>	required for POST  not valid for GET	For a server level workflow, this is the name of the target server. For an instance or database level workflow, this is the server that hosts the target instance or database.  Example: target1.mycompany.com
<b>instance</b>	required for POST (for instance or database level workflows)  not valid for GET	For an instance level workflow, this is the name of the target instance. For a database level workflow, this is the instance that services the target database.  Example: orcl11202inst01
<b>database</b>	required for POST (for database level workflows)  not valid for GET	Name of the target database.  Example: orclDB07
<b>params</b>	may be required for POST  not valid for GET	Any input parameters for the workflow that are designated Runtime in the deployment.  Example: ['Gather Parameters for Oracle Compliance.Compliance Type']=CIS

## Object Identifier

To GET detailed information about a specific workflow execution, you must specify the object ID in the URL:

GET https://<DMA server>:<port>/dma/api/auto/running/workflow/<id>

Name	Required	Description
id	optional for GET	Unique alpha-numeric identifier of the running workflow
	not valid for POST	Example: ff8443813bfd79c7013bfd7a53d10000

## Return Codes

**Note:** The following list of return codes pertains to all HPE DMA APIs. The Running API does not support PUT or DELETE.

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all work	GET https://<DMA server>:<port>/dma/api/auto/running  <b>Example:</b> GET https://DMA1.mycompany.com:8443/dma/api/auto/running

Objective	Request
<p>flows that are currently running or have finished running in the last 60 seconds</p>	<p>Response Body (only one workflow is running):</p> <pre> &lt;feed   xmlns='http://www.w3.org/2005/Atom'   xmlns:sop='http://www.hp.com/dma/api/sop'&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-03-09T00:32:15Z&lt;/updated&gt;   &lt;title&gt;Active Workflows&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c&lt;/id&gt;   &lt;published&gt;2013-03-09T00:22:09Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:22:09Z&lt;/updated&gt;   &lt;title&gt;Provision Sybase ASE 15 Server&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c' /&gt;   &lt;link rel='alternate' type='text/html'  href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d4c5e7c013d 4c5f3cb51626' /&gt;     &lt;sop:target server='target1.mycompany.com' /&gt;     &lt;sop:status state='Running' /&gt;     &lt;sop:deployment name='Provision Sybase ASE 15 Server' /&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get the status of each step in a specific workflow execution</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c</p> <p>Note that the &lt;id&gt; specified here is the same as the &lt;id&gt; element returned for the workflow execution listed in the previous example.</p> <p>Response Body:</p>

Objective	Request
	<pre> &lt;feed   xmlns='http://www.w3.org/2005/Atom'   xmlns:sop='http://www.hp.com/dma/api/sop'&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-03-09T00:22:09Z&lt;/updated&gt;   &lt;title&gt;Provision Sybase ASE 15 Server&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d4c5e7c013d 4c5f3cb51626' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c/step/ff8080813d4120ee013d4c86b45c1859&lt;/id&gt;   &lt;published&gt;2013-03-09T00:22:09Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:22:09Z&lt;/updated&gt;   &lt;title&gt;Prepare Sybase Call Wrapper&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c/step/ff8080813d4120ee013d4c86b45c1859' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5d43013d4c5d 4d0a00ae' /&gt;   &lt;sop:status state='Finished' rc='0'/&gt;   &lt;/entry&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c/step/ff8080813d4120ee013d4c8744f1189e&lt;/id&gt;   &lt;published&gt;2013-03-09T00:22:46Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:22:46Z&lt;/updated&gt;   &lt;title&gt;Validate Sybase ASE 15 Provisioning Parameters&lt;/title&gt; </pre>

Objective	Request
	<pre>                 &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c/step/ff8080813d4120ee013d4c8744f1189e' /&gt;                 &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5e7c013d4c5e e4920a7f' /&gt;                 &lt;sop:status state='Finished' rc='0' /&gt;             &lt;/entry&gt;         &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c/step/ff8080813d4120ee013d4c875f1818b2&lt;/id&gt;                 &lt;published&gt;2013-03-09T00:22:52Z&lt;/published&gt;                 &lt;updated&gt;2013-03-09T00:22:52Z&lt;/updated&gt;                 &lt;title&gt;Sybase - Advanced Parameters&lt;/title&gt;                 &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c/step/ff8080813d4120ee013d4c875f1818b2' /&gt;                 &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5e7c013d4c5e 8fc60246' /&gt;                 &lt;sop:status state='Finished' rc='0' /&gt;             &lt;/entry&gt;         &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c/step/ff8080813d4120ee013d4c87963e1920&lt;/id&gt;                 &lt;published&gt;2013-03-09T00:23:07Z&lt;/published&gt;                 &lt;updated&gt;2013-03-09T00:23:07Z&lt;/updated&gt;                 &lt;title&gt;Check If Download File Exists&lt;/title&gt;                 &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 20ee013d4c86b407184c/step/ff8080813d4120ee013d4c87963e1920' /&gt;                 &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4669f6013d466a 0a7e01ba' /&gt;                 &lt;sop:status state='Finished' rc='2' /&gt;             &lt;/entry&gt;         &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 </pre>

Objective	Request
	<pre> https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88772f199a' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5de0013d4c5e11f103aa' /&gt;   &lt;sop:status state='Finished' rc='0' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8&lt;/id&gt;   &lt;published&gt;2013-03-09T00:24:35Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:24:35Z&lt;/updated&gt;   &lt;title&gt;Run Sybase Silent Install&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5de0013d4c5e22170492' /&gt;   &lt;sop:status state='Finished' rc='0' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c913fa91a83&lt;/id&gt;   &lt;published&gt;2013-03-09T00:33:40Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:33:40Z&lt;/updated&gt;   &lt;title&gt;Set Sybase User Password&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c913fa91a83' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5e7c013d4c5ed6e00933' /&gt;   &lt;sop:status state='Finished' rc='0' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c9178071ae6&lt;/id&gt;   &lt;published&gt;2013-03-09T00:33:54Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:33:54Z&lt;/updated&gt;   &lt;title&gt;Validate Results&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d41 </pre>



Objective	Request
	<p><b>Tip:</b> To view more detailed information about the execution of this workflow, perform a GET using the URL returned in the <code>&lt;sop:script-execution&gt;</code> element. This is helpful for troubleshooting.</p>
<p>View more detailed information about the execution of a specific step</p>	<p>GET <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;running workflow id&gt;/step/&lt;step id&gt;</code></p> <p><b>Example:</b></p> <p>GET <code>https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8</code></p> <p>Note that the URL specified here is the <code>&lt;id&gt;</code> element for the Run Sybase Silent Install step in the previous example.</p> <p>Response Body (only the first two entries are shown here):</p> <pre>&lt;feed   xmlns='http://www.w3.org/2005/Atom'   xmlns:sop='http://www.hp.com/dma/api/sop' &gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-03-09T00:24:35Z&lt;/updated&gt;   &lt;title&gt;Run Sybase Silent Install&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/step/view/ff8080813d4c5de0013d4c5e22170492' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8/header&lt;/id&gt;   &lt;published&gt;2013-03-09T00:24:35Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:42:33Z&lt;/updated&gt;   &lt;title&gt;Header&lt;/title&gt;   &lt;content&gt;&lt;/content&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120</pre>

Objective	Request
	<pre> ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8/stdout&lt;/id&gt;   &lt;published&gt;2013-03-09T00:24:35Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:42:33Z&lt;/updated&gt;   &lt;title&gt;Standard Output&lt;/title&gt;   &lt;content&gt;     [INFO]: Run Sybase Silent Install     [INFO]: Running test: run_setup     [INFO]: Test description: Runs the setup.     [INFO]: Run Sybase Installation/Patch Setup successful. You may proceed.   &lt;/content&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120 ee013d4c86b407184c/step/ff8080813d4120ee013d4c88edf119d8/stderr&lt;/id&gt;   &lt;published&gt;2013-03-09T00:24:35Z&lt;/published&gt;   &lt;updated&gt;2013-03-09T00:42:33Z&lt;/updated&gt;   &lt;title&gt;Standard Error&lt;/title&gt;   &lt;content&gt;&lt;/content&gt; &lt;/entry&gt;   &lt;sop:status state='Finished' rc='0' /&gt; &lt;/feed&gt; </pre>
<p>Start a workflow with a server level target, and specify the Runtime parameter values in the URL.</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running?workflow=&lt;workflow_name&gt;&amp;deployment=&lt;deployment_name&gt;&amp;server=&lt;server_name&gt;&amp;params['&lt;step_name&gt;.&lt;param1_name&gt;']=&lt;param1_value&gt;&amp;params['&lt;step_name&gt;.&lt;param2_name&gt;']=&lt;param2_value&gt;...</p> <p><b>Example:</b></p> <p>POST https://DMA1.mycompany.com:8443/dma/api/auto/running?workflow=TEST_Ping_Servers&amp;deployment=Test&amp;server=target1.mycompany.com&amp;params['Ping Computer.Hostname']=svr1.mycompany.com&amp;params['Ping Computer.Hostname']=svr2.mycompany.com</p> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns='http://www.w3.org/2005/Atom'   xmlns:sop='http://www.hp.com/dma/api/sop' &gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9a3 a5013d038a54f65678&lt;/id&gt;   &lt;published&gt;2013-02-22T20:13:50Z&lt;/published&gt;   &lt;updated&gt;2013-02-22T20:13:50Z&lt;/updated&gt;   &lt;title&gt;TEST_Ping_Servers&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9 a3a5013d038a54f65678' /&gt;   &lt;link rel='alternate' type='text/html' </pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cf9a3a5013d0309695a4d68' /&gt;   &lt;sop:target server='target1.mycompany.com' /&gt;   &lt;sop:status state='Running' /&gt;   &lt;sop:deployment name='TEST_Ping_Servers' /&gt; &lt;/entry&gt;</pre> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the &lt;id&gt; element to perform a GET.</p>
<p>Start a workflow with a server level target, and specify the Runtime parameter values in a file.</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running?workflow=&lt;workflow_name&gt;&amp;deployment=&lt;deployment_name&gt;&amp;server=&lt;server_name&gt;</code></p> <p><b>Example:</b></p> <p>NOTE: Here, a cURL command is shown to demonstrate how to specify the name of the file that contains the Runtime parameter values.</p> <pre>curl -X POST -H "Content-Type:application/x-www-form-urlencoded" -g -v -k -u autotest:autotest --data-binary @pingParams.txt "https://DMA1.mycompany.com:8443/dma/api/auto/running?workflow=TEST_Ping_Servers&amp;deployment=Test&amp;server=target1.mycompany.com"</pre> <p>Contents of the pingParams.txt file:</p> <pre>params['Ping Computer.Hostname']=srvr1.mycompany.com&amp;params['Ping Computer.Hostname']=srvr2.mycompany.com</pre> <p>Response Body:</p> <pre>&lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9a3a5013d0394eee3568c&lt;/id&gt;   &lt;published&gt;2013-02-22T20:25:24Z&lt;/published&gt;   &lt;updated&gt;2013-02-22T20:25:24Z&lt;/updated&gt;   &lt;title&gt;TEST_Ping_Servers&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9a3a5013d0394eee3568c' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cf9a3a5013d0309695a4d68' /&gt;   &lt;sop:target server='target1.mycompany.com' /&gt;   &lt;sop:status state='Running' /&gt;   &lt;sop:deployment name='TEST_Ping_Servers' /&gt; &lt;/entry&gt;</pre> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the &lt;id&gt; element to perform a GET.</p>

Objective	Request
<p>Start a workflow with a server level target, and specify all of the URL parameters in a file.</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running</code></p> <p><b>Example:</b></p> <p>NOTE: Here, a cURL command is shown to demonstrate how to specify the name of the file that contains the URL parameters.</p> <pre>curl -X POST -H "Content-Type:application/x-www-form-urlencoded" -g -v -u autotest:autotest --data-binary @allParams.txt "https://DMA1.mycompany.com:8443/dma/api/auto/running"</pre> <p>Contents of the <code>allParams.txt</code> file:</p> <pre>workflow=TEST_Ping_Servers&amp;deployment=Test&amp;server=target1.mycompany.com&amp;params ['Ping Computer.Hostname']=srvr1.mycompany.com&amp;amp;params['Ping Computer.Hostname']=srvr2.mycompany.com</pre> <p><b>Response Body:</b></p> <pre>&lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9a3 a5013d03a5c78f56a0&lt;/id&gt;   &lt;published&gt;2013-02-22T20:43:49Z&lt;/published&gt;   &lt;updated&gt;2013-02-22T20:43:49Z&lt;/updated&gt;   &lt;title&gt;TEST_Ping_Servers&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cf9 a3a5013d03a5c78f56a0' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813cf9a3a5013d 0309695a4d68' /&gt;   &lt;sop:target server='target1.mycompany.com' /&gt;   &lt;sop:status state='Running' /&gt;   &lt;sop:deployment name='TEST_Ping_Servers' /&gt; &lt;/entry&gt;</pre> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the <code>&lt;id&gt;</code> element to perform a GET.</p> </div>
<p>Start a workflow with an instance level</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running</code></p> <p><b>Example:</b></p> <pre>curl -X POST -H "Content-Type:application/x-www-form-urlencoded" -g -v -u admin:adminpwd --data-binary @allParams_inst.txt "https://DMA1.mycompany.com:8443/dma/api/auto/running"</pre> <p>Contents of the <code>allParams_inst.txt</code> file:</p> <pre>workflow=RunOracleComplianceAudit&amp;deployment=Deploy_ RunOracleComplianceAudit&amp;server=target1.mycompany.com&amp;instance=orcl001&amp;params</pre>

Objective	Request
<p>target, and specify all of the URL parameters in a file.</p>	<pre>[ 'Gather Parameters for Oracle Compliance.Compliance Type']=CIS&amp;params['Gather Advanced Parameters for Oracle Compliance.Email Addresses to Receive Report'] =db_compliance_team@mycompany.com&amp;params['Gather Advanced Parameters for Oracle Compliance.Email Mime Type']=html&amp;params['Gather Advanced Parameters for Oracle Compliance.Email Subject Line']=Oracle%20Compliance%20Report&amp;params['Gather Advanced Parameters for Oracle Compliance.SMTP Server Address'] =smtprsvr01.mycompany.com</pre> <p>Response Body:</p> <pre>&lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03d9 41013d11a35a301a08&lt;/id&gt;   &lt;published&gt;2013-02-25T13:55:50Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T13:55:50Z&lt;/updated&gt;   &lt;title&gt;Run Oracle Compliance Audit&lt;/title&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03 d941013d11a35a301a08' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d043530013d 043552840357' /&gt;   &lt;sop:target server='target1.mycompany.com' instance='orcl001' /&gt; &lt;sop:status state='Running' /&gt; &lt;/entry&gt;</pre> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the &lt;id&gt; element to perform a GET.</p> </div>
<p>Start a workflow with a database level target, and specify all of the URL</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running</p> <p><b>Example:</b></p> <pre>curl -X POST -H "Content-Type:application/x-www-form-urlencoded" -g -v -u admin:adminpwd --data-binary @allParams_db.txt "https://DMA1.mycompany.com:8443/dma/api/auto/running"</pre> <p>Contents of the allParams_db.txt file:</p> <pre>workflow=Copy%20of%20Backup%20MS%20SQL%20Database&amp;deployment=Deploy_ BackupMSSQLDatabase&amp;server=target3.mycompany.com&amp;instance=SQLsrvr01&amp;database=db0 01&amp;params['Gather Parameters for MS SQL Database Backup.Target Backup Path'] ="c:\dbbackup"</pre> <p>Response Body:</p> <pre>&lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt;</pre>

Objective	Request
<p>parameters in a file.</p>	<pre>&lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03d941013d11b197ae1ed2&lt;/id&gt; &lt;published&gt;2013-02-25T14:11:24Z&lt;/published&gt; &lt;updated&gt;2013-02-25T14:11:24Z&lt;/updated&gt; &lt;title&gt;Copy of Backup MS SQL Database&lt;/title&gt; &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03d941013d11b197ae1ed2' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d03d941013d11ab8e161c3b' /&gt; &lt;sop:target server='target3.mycompany.com' instance='SQLsrvr01' database='db001' /&gt; &lt;sop:status state='Running' /&gt; &lt;sop:deployment name='Copy of Backup MS SQL Database' /&gt; &lt;/entry&gt;</pre> <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the &lt;id&gt; element to perform a GET.</p> </div>
<p>Start a workflow with a data base level target, and specify all values in XML.</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running</p> <p><b>Example:</b></p> <pre>curl -X POST -H "Content-Type:application/xml" -g -v -u admin:adminpwd --data-binary @values.xml "https://DMA1.mycompany.com:8443/dma/api/auto/running"</pre> <p>Contents of the values.xml file:</p> <pre>&lt;sop:run workflow="Copy of Backup MS SQL Database" deployment="Copy of Backup MS SQL Database" xmlns:sop='http://www.hp.com/dma/api/sop'&gt;   &lt;sop:server name="target3.mycompany.com" /&gt;   &lt;sop:instance name="SQLsrvr01" /&gt;   &lt;sop:database name="db001" /&gt;   &lt;sop:parameters&gt;     &lt;sop:parameter name="Gather Parameters for MS SQL Database Backup.Target Backup Path"&gt;       &lt;sop:value&gt;c:\dbbackup&lt;/sop:value&gt;     &lt;/sop:parameter&gt;   &lt;/sop:parameters&gt; &lt;/sop:run&gt;</pre> <p><b>Response Body:</b></p> <pre>&lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03d941013d11b197ae1ed2&lt;/id&gt;</pre>

Objective	Request
	<pre> &lt;published&gt;2013-02-25T14:11:24Z&lt;/published&gt; &lt;updated&gt;2013-02-25T14:11:24Z&lt;/updated&gt; &lt;title&gt;Copy of Backup MS SQL Database&lt;/title&gt; &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d03 d941013d11b197ae1ed2' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d03d941013d 11ab8e161c3b' /&gt; &lt;sop:target server='target3.mycompany.com' instance='SQLsrvr01' database='db001' /&gt; &lt;sop:status state='Running' /&gt; &lt;sop:deployment name='Copy of Backup MS SQL Database' /&gt; &lt;/entry&gt; </pre> <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p><b>Tip:</b> To monitor the status of your workflow execution, use the URL returned in the &lt;id&gt; element to perform a GET.</p> </div>
<p>Start a bridged execution workflow with multiple instance-level targets, and specify all parameter values in the URL.</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running/workflow&lt;running workflow id/scriptExecution/&lt;script execution id&gt;</p> <p><b>Example:</b></p> <p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running?workflow=&lt;workflow_name&gt;&amp;deployment=&lt;deployment_name&gt;&amp;server=&lt;server_name&gt;&amp;instance=&lt;instance_name&gt;&amp;params['&lt;step_name&gt;.&lt;sourceTarget_name&gt;']= &lt;server_id1&gt;-&lt;instance_id1&gt;&amp;params['&lt;step_name&gt;.&lt;destinationTarget_name&gt;']= &lt;server_id2&gt;-&lt;instance_id2&gt;&amp;params['&lt;step_name&gt;.&lt;param1_name&gt;']=&lt;param1_value&gt;&amp;params['&lt;step_name&gt;.&lt;param2_name&gt;']=&lt;param2_value...</p> <p><b>Response Body:</b></p> <pre> &lt;entry xmlns='http://www.w3.org/2005/Atom' xmlns:sop='http://www.hp.com/dma/api/sop'&gt; &lt;id&gt;https://randomtask.usa.hp.com:8443/dma/api/auto/running/workflow/90cec8cd472 4c1c50147d655797b1f53&lt;/id&gt; &lt;published&gt;2014-08-14T21:03:51Z&lt;/published&gt; &lt;updated&gt;2014-08-14T21:03:51Z&lt;/updated&gt; &lt;title&gt;Oracle - Export and Refresh Database via Data Pump&lt;/title&gt; &lt;link rel='alternate' type='application/atom+xml' href='https://randomtask.usa.hp.com:8443/dma/api/auto/running/workflow/90cec8cd4 724c1c50147d655797b1f53' /&gt; &lt;link rel='alternate' type='text/html' href='https://randomtask.usa.hp.com:8443/dma/sop/workflow/view/90cec8cd47d2a2210 147d2a2abea1243' /&gt; &lt;sop:target server='minion3.hpswlab.adapps.hp.com' instance='T05' /&gt; &lt;sop:status state='Running' /&gt; &lt;sop:deployment name='ExportandRefreshOracleDatabaseviaDataPump_ </pre>

Objective	Request
	<pre>StdExportAndRefresh_Linux_Oracle_11202_Latest' /&gt; &lt;/entry&gt;</pre>
<p>View troubleshooting information pertinent to a workflow execution</p> <p><b>Successful execution</b></p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;running workflow id&gt;/scriptExecution/&lt;script execution id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813cfda1b2013cfe027f51f68/scriptExecution/ff8080813cfda1b2013cfef028e31f8f</p> <p>Note that the URL specified here was returned in the &lt;sop:script-execution&gt; element of a previous GET for a specific workflow execution. In this case, the execution was successful, so there is no information in the Standard Error entry.</p> <p><b>Response Body:</b></p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d420b9f7b37b5/scriptExecution/ff8080813d4120ee013d420ba0a737cd&lt;/id&gt;     &lt;author&gt;       &lt;name&gt;HPE DMA&lt;/name&gt;     &lt;/author&gt;     &lt;updated&gt;2013-03-06T23:46:30Z&lt;/updated&gt;     &lt;title&gt;Script Execution Output&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d420b9f7b37b5/scriptExecution/ff8080813d4120ee013d420ba0a737cd' /&gt;     &lt;entry&gt;       &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d420b9f7b37b5/scriptExecution/ff8080813d4120ee013d420ba0a737cd/stdout&lt;/id&gt;         &lt;published&gt;2013-03-06T23:46:30Z&lt;/published&gt;         &lt;updated&gt;2013-03-06T23:46:30Z&lt;/updated&gt;         &lt;title&gt;Standard Output&lt;/title&gt;         &lt;content&gt;Started job 159370001       &lt;/content&gt;     &lt;/entry&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d420b9f7b37b5/scriptExecution/ff8080813d4120ee013d420ba0a737cd/stderr&lt;/id&gt;       &lt;published&gt;2013-03-06T23:46:30Z&lt;/published&gt;       &lt;updated&gt;2013-03-06T23:46:30Z&lt;/updated&gt;       &lt;title&gt;Standard Error&lt;/title&gt;       &lt;content/&gt;     &lt;/entry&gt;</pre>



Objective	Request
	<pre>&lt;sop:target server='target1.mycompany.com' /&gt; &lt;/feed&gt;</pre>
<p>View troubleshooting information pertinent to a workflow execution</p> <p><i>Aborted execution</i></p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/auto/running/workflow/&lt;running workflow id&gt;/scriptExecution/&lt;script execution id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d42119b043e9f/scriptExecution/ff8080813d4120ee013d42119b663ea5</p> <p>Note that the URL specified here was returned in the &lt;sop:script-execution&gt; element of a previous GET for a specific workflow execution. In this example, HPE DMA aborted the workflow, because the user who attempted to run it did not have the necessary permissions in the server management system.</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:sop="http://www.hp.com/dma/api/sop"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d42119b043e9f/scriptExecution/ff8080813d4120ee013d42119b663ea5&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-03-06T23:40:07Z&lt;/updated&gt;   &lt;title&gt;Script Execution Output&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d42119b043e9f/scriptExecution/ff8080813d4120ee013d42119b663ea5' /&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d42119b043e9f/scriptExecution/ff8080813d4120ee013d42119b663ea5/stdout&lt;/id&gt;     &lt;published&gt;2013-03-06T23:40:07Z&lt;/published&gt;     &lt;updated&gt;2013-03-06T23:40:07Z&lt;/updated&gt;     &lt;title&gt;Standard Output&lt;/title&gt;     &lt;content&gt;Could not start workflow, see errors&lt;/content&gt;   &lt;/entry&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/auto/running/workflow/ff8080813d4120ee013d42119b043e9f/scriptExecution/ff8080813d4120ee013d42119b663ea5/stderr&lt;/id&gt;     &lt;published&gt;2013-03-06T23:40:07Z&lt;/published&gt;     &lt;updated&gt;2013-03-06T23:40:07Z&lt;/updated&gt;     &lt;title&gt;Standard Error&lt;/title&gt;     &lt;content&gt;Could not find the Program APX com.hp.dma.conn.sa.westapx used to run WEST. Check user permissions.   &lt;/entry&gt;</pre>

Objective	Request
	<pre>User must belong to a group with List and Execute permissions on the folder containing the APX.&lt;/content&gt; &lt;/entry&gt; &lt;sop:target server='target1.mycompany.com' /&gt; &lt;/feed&gt;</pre>

## Organizations API

Organizations are containers that you can use to organize the servers in your environment into groups that require the same role-based access permissions. An organization contains servers, instances, and databases that can be specified as targets for a deployment. The HPE DMA target environment hierarchy looks like this:



Servers, instances, and databases inherit their permissions from the organization to which they belong.

The Organization API provides a mechanism that enables you to read, create, modify and delete HPE DMA organizations. The capabilities associated with your role determine which Organization API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	<p><code>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/env/organization</code></p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	organization

### Supported HTTP Methods

GET, PUT, POST, DELETE

### Content Type

application/atom+xml

### Permissions and Constraints

- Only users who have READ permission for an organization can GET information about that organization or the servers, instances, and databases that it contains.

- Only users who have a role with Administrator capability can create (POST) an organization.
- If you do not explicitly specify permissions when you create (POST) an organization, no roles have permission to READ, WRITE, or DEPLOY to that organization.
- Only users who have WRITE permission for a organization can modify (PUT) or delete (DELETE) the organization or any server, instance, or database that it contains.
- Organization names must be unique. Server names must also be unique. Instance names must be unique for a given instance type on a given server. Database names must be unique within an instance.
- Organizations that contain servers cannot be deleted.
- The Default organization cannot be deleted.
- Organizations cannot be renamed.
- If multiple servers host an instance, the servers must all reside in the same organization.

## Query Parameters

Name	Required	Description
<b>orgName</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the organization that you want to GET  Example: Test%20Lab

## Object Identifier

When you want to modify (PUT) or DELETE a specific organization, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/organization/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the organization  Example: ff8443813bfd79c7013bfd7a53d10000

**Tip:** You can specify the object ID for a GET operation instead of specifying the orgName query parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request

Code	Meaning
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all organizations	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization</p> <p><b>Example:</b> GET https://DMA1.mycompany.com:8443/dma/api/env/organization</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T16:52:06Z&lt;/updated&gt;   &lt;title&gt;Organizations&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d03daf1680000&lt;/id&gt;     &lt;published&gt;2013-02-25T16:52:06Z&lt;/published&gt;</pre>

Objective	Request
	<pre> &lt;updated&gt;2013-02-22T21:41:53Z&lt;/updated&gt; &lt;title&gt;Default&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d03daf1680000' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d03daf1680000' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d94101 3d12443d93219a&lt;/id&gt; &lt;published&gt;2013-02-25T16:52:06Z&lt;/published&gt; &lt;updated&gt;2013-02-25T16:51:34Z&lt;/updated&gt; &lt;title&gt;Test Lab&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d12443d93219a' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d12443d93219a' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a specific organization by ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a</p> <p><b>Response Body:</b></p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d94101 3d12443d93219a&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T16:53:25Z&lt;/updated&gt; </pre>

Objective	Request
	<pre> &lt;title&gt;Test Lab&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d12443d93219a' /&gt; &lt;env:organization name='Test Lab'&gt;   &lt;env:permissions/&gt; &lt;/env:organization&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d1244 7262219b&lt;/id&gt;   &lt;published&gt;2013-02-25T16:53:25Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T16:51:48Z&lt;/updated&gt;   &lt;title&gt;target1.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 447262219b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 447262219b' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d1244 72a2219c&lt;/id&gt;   &lt;published&gt;2013-02-25T16:53:25Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T16:51:48Z&lt;/updated&gt;   &lt;title&gt;target2.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 4472a2219c' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 4472a2219c' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a specific organization by name</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization?orgName=&lt;organization name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/organization?orgName=Test%20Lab</p> <p>Response Body:</p>

Objective	Request
	<pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T16:55:22Z&lt;/updated&gt;   &lt;title&gt;Test Lab&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:organization name='Test Lab'&gt;     &lt;env:permissions/&gt;   &lt;/env:organization&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b&lt;/id&gt;   &lt;published&gt;2013-02-25T16:55:22Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T16:51:48Z&lt;/updated&gt;   &lt;title&gt;target1.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;/entry&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d124472a2219c&lt;/id&gt;   &lt;published&gt;2013-02-25T16:55:22Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T16:51:48Z&lt;/updated&gt;   &lt;title&gt;target2.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d124472a2219c' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d124472a2219c' /&gt;   &lt;link rel='alternate' type='text/html' </pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Create a new organization</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization</code></p> <p><b>Example:</b></p> <p>POST <code>https://DMA1.mycompany.com:8443/dma/api/env/organization</code></p> <p>Request Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:organization name='New Org'&gt;     &lt;env:permissions&gt;       &lt;env:permission name='DMA Users' read='true' deploy='true' /&gt;       &lt;env:permission name='DMA Admins' read='true' write='true' deploy='true' /&gt;       &lt;env:permission name='DMA Workflow Designers' read='true' deploy='true' /&gt;     &lt;/env:permissions&gt;   &lt;/env:organization&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d94 1013d124b3fe7219d&lt;/id&gt;     &lt;published&gt;2013-02-25T16:59:14Z&lt;/published&gt;     &lt;updated&gt;2013-02-25T16:59:14Z&lt;/updated&gt;     &lt;title&gt;New Org&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d 941013d124b3fe7219d' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d 941013d124b3fe7219d' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;     &lt;env:organization name='New Org'&gt;       &lt;env:permissions&gt;         &lt;env:permission name='DMA Admins' read='true' write='true' deploy='true' /&gt;         &lt;env:permission name='DMA Users' read='true' deploy='true' /&gt;         &lt;env:permission name='DMA Workflow Designers' read='true' deploy='true' /&gt;</pre>



Objective	Request
	<pre>                 &lt;/env:permissions&gt;             &lt;/env:organization&gt;         &lt;/entry&gt;     </pre>
<p>Modify an existing organization</p>	<p>PUT <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization/&lt;id&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization/&lt;id&gt;</a></p> <p><b>Example:</b></p> <p>PUT <a href="https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d">https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d</a></p> <p>This example changes the permissions for the organization created in the previous example.</p> <p><b>Request Body:</b></p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:organization name='New Org'&gt;     &lt;env:permissions&gt;       &lt;env:permission name='DMA Users' read='true' /&gt;       &lt;env:permission name='DMA Admins' read='true' write='true' deploy='true' /&gt;       &lt;env:permission name='DMA Workflow Designers' read='true' /&gt;     &lt;/env:permissions&gt;   &lt;/env:organization&gt; &lt;/entry&gt;     </pre> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d&lt;/id&gt;   &lt;published&gt;2013-02-25T17:12:27Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T16:59:14Z&lt;/updated&gt;   &lt;title&gt;New Org&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;env:organization name='New Org'&gt;     &lt;env:permissions&gt;       &lt;env:permission name='DMA Admins' read='true' write='true' deploy='true' /&gt;       &lt;env:permission name='DMA Users' read='true' /&gt;     &lt;/env:permissions&gt;   &lt;/env:organization&gt; &lt;/entry&gt;     </pre>

Objective	Request
	<pre>                 &lt;env:permission name='DMA Workflow Designers' read='true' /&gt;             &lt;/env:permissions&gt;         &lt;/env:organization&gt;     &lt;/entry&gt;             </pre>
Delete an existing organization	<p>DELETE <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/organization/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>DELETE <code>https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d124b3fe7219d</code></p> <p>No response body is returned.</p>

## Related Topics

["Servers API" below](#)

["Instances API" on page 108](#)

["Databases API" on page 118](#)

["Smart Groups API" on page 125](#)

["Custom Fields API" on page 138](#)

["Unassigned Servers API" on page 146](#)

# Servers API

Servers, instances, and databases can be used as targets for deployments. The HPE DMA target environment hierarchy looks like this:

Organization → Server → Instance → Database

The Server API provides a mechanism that enables you to perform the following operations:

- Get information about a specific server
- Add a server to an existing organization
- Remove a server from an organization
- Add a custom field to a server
- Modify the value of an existing custom field associated with the server

The capabilities associated with your role determine which Server API operations you are permitted to perform (see ["Permissions and Constraints"](#)).

## Resource Information

Resource URL	<p><code>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/env/server</code></p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
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Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	server

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Only users who have WRITE permission for an organization can add (POST) a server to that organization.
- Only users who have READ permission for an organization can GET information about that organization or the servers, instances, and databases that it contains.
- Only users who have WRITE permission for an organization can modify (PUT) or delete (DELETE) the organization or any server, instance, or database that it contains.
- Server names must be unique. Instance names must be unique for a given server. Database names must be unique within an instance.
- Servers that contain one or more instances cannot be deleted.
- Servers, instances, or databases specified as targets in any deployment cannot be deleted (nor can their parent objects in the target environment hierarchy).
- A server cannot be added to an organization if it is already assigned to another organization. Only unassigned servers can be added (see "[Unassigned Servers API](#)").
- A server must already exist in the server management platform before it can be added to an organization. With HP Server Automation (SA), for example, a server must be managed by SA and have the DMA Client Files policy (attached and remediated). Servers that meet these criteria appear in the list of unassigned servers.

## Query Parameters

Name	Required	Description
<b>orgName</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the organization that contains the server that you want to GET.  Example: Test%20Lab  If you specify the orgName, you must also specify the serverName.

Name	Required	Description
<b>serverName</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the server that you want to GET.  Example: target3.mycompany.com  If you specify the serverName, you must also specify the orgName.

## Object Identifier

When you want to modify (PUT) or DELETE a specific server, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/server/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the server  Example: ff8080813d03d941013d12447262219b

**Tip:** You can specify the object ID for a GET operation instead of specifying the orgName and serverName query parameters.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_	For a POST, the object cannot be created because an object with the same name

Code	Meaning
CONFLICT	already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

**Tip:** To list all servers that a specific organization contains, see ["Organizations API" on page 90](#).

Objective	Request
Get detail ed information about a server by specifying its ID	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b</p> <p><b>Response Body:</b></p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T17:29:37Z&lt;/updated&gt;   &lt;title&gt;target1.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server name='target1.mycompany.com' device-id='4050001' connector-uuid='ff8080813d03d743013d03d877ae0001'&gt;     &lt;env:custom-field name='DEBUG_LEVEL' value='' /&gt;   &lt;/env:server&gt; &lt;/feed&gt;</pre>
Get detail	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server?orgName=&lt;org name&gt;&amp;serverName=&lt;server name&gt;</p>

Objective	Request
<p>ed information about a server by specifying its name</p>	<p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/server?orgName=Test%20Lab&amp;serverName=target1.mycompany.com</p> <p><b>Response Body:</b></p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T17:46:53Z&lt;/updated&gt;   &lt;title&gt;target1.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12447262219b' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server name='target1.mycompany.com' device-id='4050001' connector-uuid='ff8080813d03d743013d03d877ae0001'&gt;     &lt;env:custom-field name='DEBUG_LEVEL' value='' /&gt;   &lt;/env:server&gt; &lt;/feed&gt;</pre>
<p>Add a server to an existing organization—specify its name in the Request Body</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server</p> <p><b>Example:</b></p> <p>POST https://DMA1.mycompany.com:8443/dma/api/env/server</p> <p>This example adds the server target3.mycompany.com to the Test Lab organization.</p> <p><b>Request Body:</b></p> <pre>&lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server name='target3.mycompany.com'&gt;   &lt;/env:server&gt; &lt;/entry&gt;</pre>

Objective	Request
	<p>Response Body:</p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1&lt;/id&gt;   &lt;published&gt;2013-02-25T17:55:09Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T17:55:09Z&lt;/updated&gt;   &lt;title&gt;target3.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server name='target3.mycompany.com' device-id='3840001' connector- uuid='ff8080813d03d743013d03d877ae0001' /&gt; &lt;/entry&gt; </pre>
<p>Add a server to an existing organization—specify its device-id in the Request Body</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server</code></p> <p><b>Example:</b></p> <p>POST <code>https://DMA1.mycompany.com:8443/dma/api/env/server</code></p> <p>This example adds the server <code>target3.mycompany.com</code> to the Test Lab organization.</p> <p>Request Body:</p> <pre> &lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server device-id='4050001' /&gt; &lt;/entry&gt; </pre> <p>Response Body:</p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12a6 </pre>

Objective	Request
	<pre> a1d321a7&lt;/id&gt;   &lt;published&gt;2013-02-25T18:39:03Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T18:39:03Z&lt;/updated&gt;   &lt;title&gt;target3.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 a6a1d321a7'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d12 a6a1d321a7'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d12443d93219a' /&gt;   &lt;env:server name='target4.mycompany.com' device-id='4050001' connector- uuid='ff8080813d03d743013d03d877ae0001' /&gt; &lt;/entry&gt; </pre> <div style="background-color: #f0f0f0; padding: 5px;"> <p><b>Tip:</b> If a server was deleted from your server management platform and then added again—and it is really the same server—you can use a PUT request to change the device-id for that server in the HPE DMA database.</p> </div>
<p>Add a custom field to an existing server</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1</p> <p>This example adds a new custom field to the server created in the previous example.</p> <p><b>Request Body:</b></p> <pre> &lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941 013d12443d93219a' /&gt;   &lt;env:server name='target3.mycompany.com'&gt;     &lt;env:custom-field name='new_field' value='ABC' /&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre> <p><b>Response Body:</b></p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt; </pre>



Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1&lt;/id&gt;   &lt;published&gt;2013-02-25T18:00:26Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T17:55:09Z&lt;/updated&gt;   &lt;title&gt;target3.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env '/&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a'/&gt;   &lt;env:server name='target3.mycompany.com' device-id='3840001' connector- uuid='ff8080813d03d743013d03d877ae0001' &gt;     &lt;env:custom-field name='new_field' value='ABC' /&gt;     &lt;env:custom-field name='DEBUG_LEVEL' value='' /&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre>
<p>Modify the value of an existing custom field</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1</p> <p>This example modifies the value of the custom field added to the server in the previous example.</p> <p><b>Request Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a'/&gt;   &lt;env:server name='target3.mycompany.com'&gt;     &lt;env:custom-field name='new_field' value='XYZ' /&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt; </pre>

Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1&lt;/id&gt;   &lt;published&gt;2013-02-25T18:03:11Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T17:55:09Z&lt;/updated&gt;   &lt;title&gt;target3.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1'/&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env '/&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a'/&gt;   &lt;env:server name='target3.mycompany.com' device-id='3840001' connector- uuid='ff8080813d03d743013d03d877ae0001'&gt;     &lt;env:custom-field name='DEBUG_LEVEL' value='' /&gt;     &lt;env:custom-field name='new_field' value='XYZ' /&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre>
<p>Modify the value of the organization for the server</p>	<p>PUT <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>PUT <code>https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1</code></p> <p>This example modifies the value of the custom field added to the server in the previous example.</p> <p>Request Body:</p> <pre> &lt;entry   xmlns='https://www.w3.org/2005/Atom'   xmlns:env='https://www.hp.com/dma/api/env '&gt;   &lt;link rel='parent' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/organization/8f82f39d2e084d0b012e0a28bcfa0000' /&gt;     &lt;env:server name='target3.mycompany.com'&gt;       &lt;env:organization-id id='8f82f39d2e084d0b012e0a28bcfa0000' /&gt;     &lt;/env:server&gt; &lt;/entry&gt; </pre> <p>Response Body:</p> <pre> &lt;entry&gt; </pre>

Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/902676cd49c1301d0149c14b4b3709a33&lt;/id&gt;   &lt;published&gt;2014-11-18T05:11:55Z&lt;/published&gt;   &lt;updated&gt;2014-11-18T05:06:17Z&lt;/updated&gt;   &lt;title&gt;target3.mycompany.com&lt;/title&gt;   &lt;link rel="self" type="application/atom+xml" href="https://DMA1.mycompany.com:8443/dma/api/env/server/902676cd49c1301d0149c14b4b3709a33" /&gt;   &lt;link rel="edit" type="application/atom+xml" href="https://DMA1.mycompany.com:8443/dma/api/env/server/902676cd49c1301d0149c14b4b3709a33" /&gt;   &lt;link rel="alternate" type="text/html" href="https://DMA1.mycompany.com:8443/dma/env" /&gt;   &lt;link rel="parent" type="application/atom+xml" href="https://DMA1.mycompany.com:8443/dma/api/env/organization/8f82f39d2e084d0b012e0a28bcfa0000" /&gt;   &lt;env:server name="target3.mycompany.com" device-id="1480001" connector- uuid="902670cf4844604a01484461f4cd0001"&gt;     &lt;env:custom-field name="test_me1" value="" /&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre>
<p>Rename an existing server</p>	<p><b>Note:</b> Only administrators have access to this section.</p> <p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/server/8f82f39d2e084d0b012e0a28bcfa0000</p> <p>This example modifies the server property name for the server 8f82f39d2e084d0b012e0a28bcfa0000. Here, the 'target4.mycompany.com' is the new name of the server property.</p> <p>Request Body:</p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   /&gt;   &lt;env:server name='target4.mycompany.com'&gt;   &lt;/env:server&gt; &lt;/entry&gt; </pre> <p>Response Body:</p>

Objective	Request
	<pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/server/8f82f39d2e084d0b012e0a28bcfa0000&lt;/id&gt;   &lt;published&gt;2013-02-25T18:03:11Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T17:55:09Z&lt;/updated&gt;   &lt;title&gt;target4.mycompany.com&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/8f82f39d2e084d0b012e0a28bcfa0000' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/8f82f39d2e084d0b012e0a28bcfa0000' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/organization/ff8080813d03d941013d12443d93219a' /&gt;   &lt;env:server name='target4.mycompany.com' device-id='3840001' connector- uuid='8f82f39d2e084d0b012e0a28bcfa0000' &gt;     &lt;/env:server&gt; &lt;/entry&gt; </pre>
<p>Remove a server from an organization</p>	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/server/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d127e717021a1</p> <p>No response body is returned.</p> <div style="background-color: #e0e0e0; padding: 5px;"> <p><b>Note:</b> This operation returns the server to the unassigned servers pool (see "<a href="#">Unassigned Servers API</a>" on page 146).</p> </div>

## Instances API

Servers, instances, and databases can be used as targets for deployments. The HPE DMA target environment hierarchy looks like this:



The Instance API provides a mechanism that enables you to perform the following operations:

- Get information about a specific instance
- Create an instance, and associate it with one or more existing servers

- Add a custom field to an instance
- Modify the value of an existing custom field associated with an instance
- Delete an instance

The capabilities associated with your role determine which Instance API operations you are permitted to perform (see "[Permissions and Constraints](#)").

## Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/env/instance By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	instance

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Only users who have WRITE permission for an organization can add (POST) an instance to a server in that organization.
- Only users who have READ permission for an organization can GET information about that organization or the servers, instances, and databases that it contains.
- Only users who have WRITE permission for an organization can modify (PUT) or delete (DELETE) the organization or any server, instance, or database that it contains.
- Instance names must be unique for a given server. Database names must be unique within an instance.
- Instances associated with one or more databases cannot be deleted.
- Servers, instances, or databases specified as targets in any deployment cannot be deleted (nor can their parent objects in the target environment hierarchy).

## Query Parameters

Name	Required	Description
<b>orgName</b>	required for GET not valid for PUT,	Name of the organization that contains a server that hosts the instance that you want to GET

Name	Required	Description
	POST, DELETE	Example: Test%20Lab
<b>serverName</b>	required for GET  not valid for PUT, POST, DELETE	Name of a server that hosts the instance that you want to GET  Example: target3.mycompany.com
<b>instanceName</b>	required for GET  not valid for PUT, POST, DELETE	Name of the instance that you want to GET  Example: QASTO1
<b>dbType</b>	required for GET  not valid for PUT, POST, DELETE	Type of databases that you want to GET  Valid Values: DB2, Oracle, SQL Server, MySQL, PostgreSQL, Sybase

## Object Identifier

When you want to modify (PUT) or DELETE a specific instance, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/instance/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the instance  Example: ff8080813d03d941013d108785291143

**Tip:** You can specify the object ID for a GET operation instead of specifying the orgName, serverName, dbType, and instanceName query parameters.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.

Code	Meaning
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

**Tip:** To list all instances associated with a specific server, see ["Servers API" on page 98](#).

Objective	Request
Get a specific instance by ID	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T19:21:21Z&lt;/updated&gt;   &lt;title&gt;QAMIN1&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143' /&gt;   &lt;link rel='edit' type='application/atom+xml'</pre>

Objective	Request
	<pre> href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d1 08785291143' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03d c873e0015' /&gt;   &lt;env:instance name='QAMIN1' type='Oracle' asm='false'&gt;     &lt;env:connection host='target4.mycompany.com' port='1521' windows- domain='' username='oracle' /&gt;     &lt;env:custom-field name='oracle sid' value='' /&gt;     &lt;env:custom-field name='sybase version' value='' /&gt;     &lt;env:custom-field name='server name' value='' /&gt;     &lt;env:custom-field name='sybase minor version' value='' /&gt;     &lt;env:custom-field name='user' value='' /&gt;     &lt;env:custom-field name='password' value='***' /&gt;     &lt;env:custom-field name='name' value='' /&gt;     &lt;env:custom-field name='oracle version' value='11.2.0.3.0' /&gt;     &lt;env:custom-field name='version' value='Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production' /&gt;     &lt;env:custom-field name='opatch' value='11.2.0.3.0' /&gt;     &lt;env:custom-field name='last patch id' value='15663328' /&gt;     &lt;env:custom-field name='patch level' value='PSU 11.2.0.3.5' /&gt;     &lt;env:custom-field name='oracle home' value='/opt/app/oracle/product/11.2.0/DB3' /&gt;     &lt;env:custom-field name='instance name' value='QAMIN1' /&gt;     &lt;env:custom-field name='os user' value='oracle' /&gt;     &lt;env:custom-field name='tns admin' value='/opt/app/oracle/product/11.2.0/DB3/network/admin' /&gt;   &lt;/env:instance&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d108 78ced114f&lt;/id&gt;   &lt;published&gt;2013-02-25T19:21:21Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T08:45:51Z&lt;/updated&gt;   &lt;title&gt;QAMIN1&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d1 0878ced114f' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d1 0878ced114f' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>



Objective	Request
<p>Get a specific instance by name</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance?orgName=&lt;org name&gt;&amp;serverName=&lt;server name&gt;&amp;instanceName=&lt;instance name&gt;&amp;dbType=&lt;database type&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/instance?orgName=Default&amp;serverName=target4.mycompany.com&amp;instanceName=QAMIN1&amp;dbType=Oracle</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T19:28:57Z&lt;/updated&gt;   &lt;title&gt;QAMIN1&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d108785291143' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;     &lt;env:instance name='QAMIN1' type='Oracle' asm='false'&gt;       &lt;env:connection host='minion1.hpswlab.adapps.hp.com' port='1521' windows-domain='' username='oracle' /&gt;       &lt;env:custom-field name='oracle sid' value='' /&gt;       &lt;env:custom-field name='sybase version' value='' /&gt;       &lt;env:custom-field name='server name' value='' /&gt;       &lt;env:custom-field name='sybase minor version' value='' /&gt;       &lt;env:custom-field name='user' value='' /&gt;       &lt;env:custom-field name='password' value='***' /&gt;       &lt;env:custom-field name='name' value='' /&gt;       &lt;env:custom-field name='oracle version' value='11.2.0.3.0' /&gt;       &lt;env:custom-field name='version' value='Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production' /&gt;       &lt;env:custom-field name='opatch' value='11.2.0.3.0' /&gt;       &lt;env:custom-field name='last patch id' value='15663328' /&gt;       &lt;env:custom-field name='patch level' value='PSU 11.2.0.3.5' /&gt;     &lt;/env:instance&gt;   &lt;/feed&gt;</pre>

Objective	Request
	<pre> &lt;env:custom-field name='oracle home' value='/opt/app/oracle/product/11.2.0/DB3'/&gt; &lt;env:custom-field name='instance name' value='QAMIN1'/&gt; &lt;env:custom-field name='os user' value='oracle'/&gt; &lt;env:custom-field name='tns admin' value='/opt/app/oracle/product/11.2.0/DB3/network/admin'/&gt; &lt;/env:instance&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d108 78ced114f&lt;/id&gt; &lt;published&gt;2013-02-25T19:28:57Z&lt;/published&gt; &lt;updated&gt;2013-02-25T08:45:51Z&lt;/updated&gt; &lt;title&gt;QAMIN1&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d1 0878ced114f' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d1 0878ced114f' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Create an instance, and associate it with two servers</p>	<p>POST <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance</a></p> <p><b>Example:</b></p> <p>POST <a href="https://DMA1.mycompany.com:8443/dma/api/env/instance">https://DMA1.mycompany.com:8443/dma/api/env/instance</a></p> <p>This example creates a new Oracle instance called <code>NewInst</code> and associates it with the two servers specified in the parent links.</p> <p>Request Body:</p> <pre> &lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03d c873e0015' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03d c89c80025' /&gt;   &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;     &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me'/&gt;   &lt;/env:instance&gt; &lt;/entry&gt; </pre>

Objective	Request
	<p>Response Body:</p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9&lt;/id&gt;   &lt;published&gt;2013-02-25T19:36:50Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T19:36:50Z&lt;/updated&gt;   &lt;title&gt;New Inst&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc89c80025' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;     &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;       &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me' /&gt;     &lt;/env:instance&gt; &lt;/entry&gt; </pre>
<p>Add a custom field to an instance</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9</p> <p>This example adds a new Custom Field called newField to the instance created in the previous example.</p> <p>Request Body:</p> <pre> &lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;   &lt;link rel='parent' type='application/atom+xml' </pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc89c80025' /&gt;   &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;     &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me' /&gt;     &lt;env:custom-field name='newField' value='ABC' /&gt;   &lt;/env:instance&gt; &lt;/entry&gt;  Response Body:  &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9&lt;/id&gt;   &lt;published&gt;2013-02-25T19:41:18Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T19:36:50Z&lt;/updated&gt;   &lt;title&gt;New Inst&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc89c80025' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;   &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;     &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me' /&gt;     &lt;env:custom-field name='newField' value='ABC' /&gt;   &lt;/env:instance&gt; &lt;/entry&gt;</pre>
<p>Modify the value of an</p>	<p>PUT <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>PUT <code>https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9</code></p> <p>This example modifies the value of the Custom Field that was added to the instance in the previous</p>

Objective	Request
existing custom field associate with an instance	<p>example.</p> <p>Request Body:</p> <pre>&lt;entry xmlns='https://www.w3.org/2005/Atom' xmlns:env='https://www.hp.com/dma/api/env'&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc89c80025' /&gt;   &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;     &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me' /&gt;     &lt;env:custom-field name='newField' value='XYZ' /&gt;   &lt;/env:instance&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9&lt;/id&gt;   &lt;published&gt;2013-02-25T19:41:18Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T19:36:50Z&lt;/updated&gt;   &lt;title&gt;New Inst&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc89c80025' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/server/ff8080813d03d941013d03dc873e0015' /&gt;   &lt;env:instance name='New Inst' type='Oracle' asm='false'&gt;     &lt;env:connection host='connectionHost' port='1521' windows-domain='' username='me' /&gt;     &lt;env:custom-field name='newField' value='XYZ' /&gt;</pre>

Objective	Request
	<pre>&lt;/env:instance&gt; &lt;/entry&gt;</pre>
Delete an instance	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/instance/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d12db8be621a9</p> <p>No response body is returned.</p>

**Note:** Some HPE DMA workflows create special Custom Fields that are not visible in the HPE DMA UI. These Custom Fields are listed in the Response Body when you perform a GET or PUT using the Instance API or Custom Field API. The names of these special Custom Fields begin with a double underscore. For example:

```
<env:custom-field name='__compliance - oracle - 9_12 - verify access to any
dba_views' value=''/>
<env:custom-field name='__compliance - oracle - 9_18 - verify access to dba_
tab_privs' value=''/>
<env:custom-field name='__compliance - oracle - 9_15 - verify access to dba_
roles' value=''/>
<env:custom-field name='__compliance - oracle - 9_35 - verify grants to
create procedure' value=''/>
<env:custom-field name='__compliance - oracle - 9_33 - verify grants to
create library' value=''/>
<env:custom-field name='__compliance - oracle - 8_06 - password grace time'
value=''/>
```

These special Custom Fields are not shown in the examples above.

## Databases API

Servers, instances, and databases can be used as targets for deployments. The HPE DMA target environment hierarchy looks like this:



The Database API provides a mechanism that enables you to perform the following operations:

- Get information about a specific database
- Create a database, and associate it with one or more existing instances
- Add a custom field to a database
- Modify the value of an existing custom field associated with a database
- Delete a database

The capabilities associated with your role determine which Database API operations you are permitted to perform (see "[Permissions and Constraints](#)").

## Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/env/database By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	database

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Only users who have WRITE permission for an organization can add (POST) a database to an instance in that organization.
- Only users who have READ permission for an organization can GET information about that organization or the servers, instances, and databases that it contains.
- Only users who have WRITE permission for an organization can modify (PUT) or delete (DELETE) the organization or any server, instance, or database that it contains.
- Database names must be unique within an instance.
- Servers, instances, or databases specified as targets in any deployment cannot be deleted (nor can their parent objects in the target environment hierarchy).

## Query Parameters

Name	Required	Description
<b>orgName</b>	optional for GET not valid for PUT, POST, DELETE	Name of the organization that contains a server that hosts an instance that services the database that you want to GET  Example: Test%20Lab
<b>serverName</b>	optional for GET not valid for PUT,	Name of a server that hosts an instance that services the database that you want to GET

Name	Required	Description
	POST, DELETE	Example: target3.mycompany.com
<b>instanceName</b>	optional for GET  not valid for PUT, POST, DELETE	Name of an instance that services the database that you want to GET  Example: QASTO1
<b>databaseName</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the database that you want to GET  Example: QASTO1db1
<b>dbType</b>	optional for GET  not valid for PUT, POST, DELETE	Type of databases that you want to GET  Valid Values: DB2, Oracle, SQL Server, MySQL, PostgreSQL, Sybase

## Object Identifier

When you want to modify (PUT) or DELETE a specific database, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/database/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the database  Example: ff8080813d03d941013d108785291143

**Tip:** You can specify the object ID for a GET operation instead of specifying the orgName, serverName, dbType, instanceName, and databaseName query parameters.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.



Code	Meaning
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

**Tip:** To list all databases associated with a specific instance, see ["Instances API" on page 108](#).

Objective	Request
Get information for a specific database by ID	<p>GET <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database/&lt;id&gt;</code></p> <p><b>Example:</b></p> <p>GET <code>https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b</code></p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T23:17:53Z&lt;/updated&gt;   &lt;title&gt;tempdb&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b' /&gt;   &lt;link rel='parent' type='application/atom+xml'</pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;   &lt;env:database name='tempdb'&gt;&lt;/env:database&gt; &lt;/feed&gt;</pre>
<p>Get information for a specific database by name</p>	<p>GET <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database?orgName=&lt;org name&gt;&amp;serverName=&lt;server name&gt;&amp;instanceName=&lt;instance name&gt;&amp;dbType=&lt;database type&gt;&amp;databaseName=&lt;database name&gt;</code></p> <p><b>Example:</b></p> <p>GET <code>https://DMA1.mycompany.com:8443/dma/api/env/database?orgName=Default&amp;serverName=target1.mycompany.com&amp;instanceName=QA2012&amp;dbType=SQL%20Server&amp;databaseName=tempdb</code></p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-25T23:16:52Z&lt;/updated&gt;   &lt;title&gt;tempdb&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d0db93c995b9b' /&gt;     &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;     &lt;env:database name='tempdb'&gt;&lt;/env:database&gt; &lt;/feed&gt;</pre>
<p>Create a database, and associate</p>	<p>POST <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database</code></p> <p><b>Example:</b></p> <p>POST <code>https://DMA1.mycompany.com:8443/dma/api/env/database</code></p> <p>This example creates a new Oracle database called newDB and associates it with the instance QAST01.</p> <p>Request Body:</p>

Objective	Request
<p>te it with an instance</p>	<pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;   &lt;env:database name='newDB'&gt;&lt;/env:database&gt; &lt;/entry&gt;</pre> <p><b>Response Body:</b></p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd&lt;/id&gt;   &lt;published&gt;2013-02-25T23:23:47Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T23:23:47Z&lt;/updated&gt;   &lt;title&gt;newDB&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;   &lt;env:database name='newDB'&gt;&lt;/env:database&gt; &lt;/entry&gt;</pre>
<p>Add a custom field to an existing database</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd</p> <p>This example adds a new custom field called newField to the database created in the previous example.</p> <p><b>Request Body:</b></p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:database name='newDB'&gt;</pre>

Objective	Request
	<pre>                 &lt;env:custom-field name='newField' value='ABC' /&gt;             &lt;/env:database&gt;         &lt;/entry&gt;  <b>Response Body:</b>          &lt;entry             xmlns="http://www.w3.org/2005/Atom"             xmlns:env="http://www.hp.com/datapal/api/env"&gt;              &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd&lt;/id&gt;             &lt;published&gt;2013-02-25T23:25:08Z&lt;/published&gt;             &lt;updated&gt;2013-02-25T23:23:47Z&lt;/updated&gt;             &lt;title&gt;newDB&lt;/title&gt;             &lt;link rel='self' type='application/atom+xml'                 href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;             &lt;link rel='edit' type='application/atom+xml'                 href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;             &lt;link rel='alternate' type='text/html'                 href='https://DMA1.mycompany.com:8443/dma/env' /&gt;             &lt;link rel='parent' type='application/atom+xml'                 href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;             &lt;env:database name='newDB'&gt;                 &lt;env:custom-field name='newField' value='ABC' /&gt;             &lt;/env:database&gt;         &lt;/entry&gt;     </pre>
<p>Modify the value of a custom field associated with a database</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd</p> <p>This example modifies the value of the custom field that was added to the database in the previous example.</p> <p><b>Request Body:</b></p> <pre>         &lt;entry             xmlns="http://www.w3.org/2005/Atom"             xmlns:env="http://www.hp.com/datapal/api/env"&gt;             &lt;env:database name='newDB'&gt;                 &lt;env:custom-field name='newField' value='XYZ' /&gt;             &lt;/env:database&gt;         &lt;/entry&gt;     </pre>

Objective	Request
	<p>Response Body:</p> <pre>&lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd&lt;/id&gt;   &lt;published&gt;2013-02-25T23:26:25Z&lt;/published&gt;   &lt;updated&gt;2013-02-25T23:23:47Z&lt;/updated&gt;   &lt;title&gt;newDB&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env' /&gt;   &lt;link rel='parent' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/instance/ff8080813d03d941013d0db9187b5b90' /&gt;     &lt;env:database name='newDB'&gt;       &lt;env:custom-field name='newField' value='XYZ' /&gt;     &lt;/env:database&gt; &lt;/entry&gt;</pre>
Delete database	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/database/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/env/database/ff8080813d03d941013d13ab50dc24dd</p> <p>No response body is returned.</p>

## Smart Groups API

Smart Groups are dynamic groups of servers, instances, or databases defined by some criteria. They are used to specify targets for deployments. As information about an environment object changes, its membership in any Smart Groups is re-evaluated. For example, say that a server has a Custom Field called `sshd_running` that is set to true. This server belongs to an SSH Group of servers. When `sshd_running` for this server changes to false, it is no longer included in the SSH Group. Each Smart Group is assigned a role. An HPE DMA user can only create Smart Groups for roles assigned to that user. If the role grants the user both READ and DEPLOY permission for an organization, the servers, instances, or databases in that organization can be used in the Smart Group.

The Smart Groups API provides a mechanism that enables you to perform the following operations:

- List all Smart Groups that are visible to your role
- Get information about a specific Smart Group
- Create a Smart Group
- Modify the expression (or expressions) used to define a specific Smart Group
- Delete a Smart Group

The capabilities associated with your role determine which Smart Group API operations that you are permitted to perform (see "[Permissions and Constraints](#)").

## Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/env/smartgroup By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	smartgroup

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

- Any HPE DMA user can create a Smart Group.
- Only HPE DMA users whose roles have Administrator capability can view all Smart Groups.
- Any user can view Smart Groups with the same role (or roles) as that user.
- You must specify the role when you create or modify a Smart Group.
- You must specify the following information when you create or modify a Smart Group:
  - Role
  - Name (must be unique)
  - Target level (server, instance, or database)
  - One or more criteria that define membership in the Smart Group—including a valid selector (for example: Organization.Name or Server.OS), a valid operator, and a valid value

You must specify at least one criterion, and you can specify multiple criteria. The criteria will be combined using a logical AND—all criteria must be satisfied in order for the target to be included in the Smart Group.

Information about the specified Target Level object and its parents is available for forming the criteria. For example, if the Target Level is instance, information for organizations and servers is also available in the drop-down.

- Criteria cannot contain a selector that contains the string "password"(for example: Instance.Password or Oracle\_Password).
- A Smart Group's target level cannot be modified after the Smart Group is created.
- A Smart Group created by a user with Administrator capability can have any registered role.
- A Smart Group created by a user who does NOT have Administrator capability can only be assigned a role that this user has.
- A Smart Group can only be modified (PUT) or deleted (DELETE) by a user who has the same role as the Smart Group.
- You cannot modify (PUT) a Smart Group that does not already exist.
- You must specify the Smart Group id in order to modify (PUT) or delete (DELETE) it.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT, POST, DELETE	Name of the Smart Group that you want to GET  Example: Linux%20Servers

## Object Identifier

When you want to modify (PUT) or DELETE a specific Smart Group, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/smartgroup/<id>`

Name	Required	Description
<b>id</b>	optional for GET  required for PUT, DELETE	Unique alpha-numeric identifier of the Smart Group  Example: ff8080813d03d941013d108785291143

**Tip:** You can specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request

Code	Meaning
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all Smart Groups	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/smartgroup</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T01:19:10Z&lt;/updated&gt;   &lt;title&gt;Smart Groups&lt;/title&gt;</pre>



Objective	Request
<p><i>t</i> <i>w</i> <i>as</i> <i>m</i> <i>ad</i> <i>e</i> <i>by</i> <i>an</i> <i>H</i> <i>P</i> <i>E</i> <i>D</i> <i>M</i> <i>A</i> <i>us</i> <i>er</i> <i>w</i> <i>ho</i> <i>se</i> <i>rol</i> <i>e</i> <i>ha</i> <i>d</i> <i>Ad</i> <i>mi</i> <i>ni</i> <i>str</i> <i>at</i> <i>or</i> <i>ca</i> <i>pa</i> <i>bili</i> <i>ty.</i></p>	<pre> &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup' /&gt; &lt;entry&gt; &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d140 f981f24f9&lt;/id&gt; &lt;published&gt;2013-02-26T01:19:10Z&lt;/published&gt; &lt;updated&gt;2013-02-26T01:19:10Z&lt;/updated&gt; &lt;title&gt;Linux Servers&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f981f24f9' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f981f24f9' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d140f9 81f24f9' /&gt; &lt;env:smart-group name='Linux Servers' role='DMA Users' target- level='Server' /&gt; &lt;/entry&gt; &lt;entry&gt; &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d140 f37b324f7&lt;/id&gt; &lt;published&gt;2013-02-26T01:19:10Z&lt;/published&gt; &lt;updated&gt;2013-02-26T01:19:10Z&lt;/updated&gt; &lt;title&gt;Oracle Instances&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f37b324f7' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f37b324f7' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d140f3 7b324f7' /&gt; &lt;env:smart-group name='Oracle Instances' role='DMA Admins' target- level='Instance' /&gt; &lt;/entry&gt; &lt;entry&gt; </pre>

<b>O b j e c t i v e</b>	<b>Request</b>
	<pre> ps://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d141014e924 fb' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 41014e924fb' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d14101 4e924fb' /&gt;     &lt;env:smart-group name='Windows Servers' role='DMA Users' target- level='Server' /&gt;     &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d423 0a18a4248&lt;/id&gt;     &lt;published&gt;2013-03-07T00:19:53Z&lt;/published&gt;     &lt;updated&gt;2013-03-07T00:19:53Z&lt;/updated&gt;     &lt;title&gt;Las Vegas Data Ctr&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 230a18a4248' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 230a18a4248' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d4120ee013d4230a 18a4248' /&gt;     &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d 42315f85424a' title='ApplyCriticalPatchUpdatetoCRSorGridHome_ InstallCurrentPSUPatch_Linux_Oracle_11203_Latest_B' /&gt;     &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d 42320edd425b' title='ApplyOracleGRIDStandalonePatchandApplyDatabasePatch_ ApplyGridPatch_Linux_Oracle_11203_Latest_B' /&gt;     &lt;env:smart-group name='Las Vegas Data Ctr' role='DMA Users' target- level='Server' /&gt;     &lt;/entry&gt; &lt;/feed&gt; </pre>
<b>L i s t a l l S</b>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/smartgroup</p>

<b>O b j e c t i v e</b>	<b>Request</b>
<b>m a r t G r o u p s v i s i b l e t o y o u r r o l e s</b>  <b>N O T E: Th is re qu es t w as m ad e by an H P E D M A u s er wi th th e D M</b>	<p><b>Response Body:</b></p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T11:58:53Z&lt;/updated&gt;   &lt;title&gt;Smart Groups&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup' /&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d140 f981f24f9&lt;/id&gt;     &lt;published&gt;2013-02-26T11:58:53Z&lt;/published&gt;     &lt;updated&gt;2013-02-26T11:58:53Z&lt;/updated&gt;     &lt;title&gt;Linux Servers&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f981f24f9' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 40f981f24f9' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d140f9 81f24f9' /&gt;     &lt;env:smart-group name='Linux Servers' role='DMA Users' target- level='Server' /&gt;   &lt;/entry&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d141 014e924fb&lt;/id&gt;     &lt;published&gt;2013-02-26T11:58:53Z&lt;/published&gt;     &lt;updated&gt;2013-02-26T11:58:53Z&lt;/updated&gt;     &lt;title&gt;Windows Servers&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 41014e924fb' /&gt;     &lt;link rel='edit' type='application/atom+xml' </pre>

Objective	Request
<p>A U se rs rol e.</p>	<pre> href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d141014e924fb' /&gt;       &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d141014e924fb' /&gt;       &lt;env:smart-group name='Windows Servers' role='DMA Users' target-level='Server' /&gt;     &lt;/entry&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4230a18a4248&lt;/id&gt;       &lt;published&gt;2013-03-07T00:19:53Z&lt;/published&gt;       &lt;updated&gt;2013-03-07T00:19:53Z&lt;/updated&gt;       &lt;title&gt;Las Vegas Data Ctr&lt;/title&gt;       &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4230a18a4248' /&gt;       &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4230a18a4248' /&gt;       &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d4120ee013d4230a18a4248' /&gt;       &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d42315f85424a' title='ApplyCriticalPatchUpdatetoCRSorGridHome_InstallCurrentPSUPatch_Linux_Oracle_11203_Latest_B' /&gt;       &lt;link rel='usedby' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d42320edd425b' title='ApplyOracleGRIDStandalonePatchandApplyDatabasePatch_ApplyGridPatch_Linux_Oracle_11203_Latest_B' /&gt;       &lt;env:smart-group name='Las Vegas Data Ctr' role='DMA Users' target-level='Server' /&gt;     &lt;/entry&gt;   &lt;/feed&gt; </pre>
<p>G et de tai led inf or</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c16166b159c</p> <p>This example returns detailed information about the Smart Group created in the previous example. The Smart Group ID is specified in the URL.</p>

<b>O b j e c t i v e</b>	<b>Request</b>
<b>m a t r i x I D</b>	<p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-03-08T22:26:53Z&lt;/updated&gt;   &lt;title&gt;Smart Groups&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c1 6166b159c&lt;/id&gt;   &lt;published&gt;2013-03-08T22:26:53Z&lt;/published&gt;   &lt;updated&gt;2013-03-08T22:26:53Z&lt;/updated&gt;   &lt;title&gt;Oracle 11.2.0 Instances&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 c16166b159c' /&gt;   &lt;link rel='edit' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 c16166b159c' /&gt;   &lt;link rel='alternate' type='text/html'  href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d4120ee013d4c161 66b159c' /&gt;   &lt;link rel='usedby' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d 4c1ceeb51733'     title='RunOracleComplianceAudit_11.2.0_instances' /&gt;   &lt;env:smart-group name='Oracle 11.2.0 Instances' role='DMA Admins' target- level='Instance'&gt;     &lt;env:expressions&gt;       &lt;env:expression custom-field='Instance.oracle version' operator='starts with' value='11.2.0' /&gt;       &lt;env:expression custom-field='Instance.RDBMS' operator='equals' value='Oracle' /&gt;     &lt;/env:expressions&gt; </pre>

<b>O b j e c t i v e</b>	<b>Request</b>
G e t s u m m a r y i n f o r m a t i o n a b o u t a l S m a r t G r o u p s t h a t h a v e t h e s p e c i f i e d n a m e	<pre>                 &lt;/env:smart-group&gt;             &lt;/entry&gt;         &lt;/feed&gt;     </pre> <div style="background-color: #e0e0e0; padding: 5px; margin: 5px 0;"><b>Note:</b> The usedby links show you which deployments use the specified Smart Group.</div> <p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup?Name=&lt;Smart Group name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/smartgroup?name=Windows%20Servers</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T12:06:50Z&lt;/updated&gt;   &lt;title&gt;Smart Groups&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup' /&gt;   &lt;entry&gt;     &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d141 014e924fb&lt;/id&gt;     &lt;published&gt;2013-02-26T12:06:50Z&lt;/published&gt;     &lt;updated&gt;2013-02-26T12:06:50Z&lt;/updated&gt;     &lt;title&gt;Windows Servers&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 41014e924fb' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d03d941013d1 41014e924fb' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d03d941013d14101 4e924fb' /&gt;     &lt;env:smart-group name='Windows Servers' role='DMA Users' target- level='Server'&gt;       &lt;env:expressions&gt;         &lt;env:expression custom-field='Server.OS' operator='contains' value='win' /&gt;     &lt;/env:smart-group&gt;   &lt;/entry&gt; &lt;/feed&gt;     </pre>

<b>O b j e c t i v e</b>	<b>Request</b>
	<pre>                 &lt;/env:expressions&gt;             &lt;/env:smart-group&gt;         &lt;/entry&gt;     &lt;/feed&gt;         </pre>
<p>Cr ea te a S m ar t Gr ou p</p>	<p>POST <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup</a></p> <p><b>Example:</b></p> <p>POST <a href="https://DMA1.mycompany.com:8443/dma/api/env/smartgroup">https://DMA1.mycompany.com:8443/dma/api/env/smartgroup</a></p> <p>This example creates a Smart Group that contains all Oracle Database 11.2.0 instances in the environment.</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;     &lt;env:smart-group name='Oracle 11.2.0 Instances' role='DMA Admins' target- level='Instance'&gt;         &lt;env:expressions&gt;             &lt;env:expression custom-field='Instance.oracle version' operator='starts with' value='11.2.0' /&gt;             &lt;env:expression custom-field='Instance.RDBMS' operator='equals' value='Oracle' /&gt;         &lt;/env:expressions&gt;     &lt;/env:smart-group&gt; &lt;/entry&gt;         </pre> <p>Response Body:</p> <pre> &lt;entry     xmlns="http://www.w3.org/2005/Atom"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c1 6166b159c&lt;/id&gt;     &lt;published&gt;2013-03-08T22:19:08Z&lt;/published&gt;     &lt;updated&gt;2013-03-08T22:19:08Z&lt;/updated&gt;     &lt;title&gt;Oracle 11.2.0 Instances&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 c16166b159c' /&gt;     &lt;link rel='edit' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4 c16166b159c' /&gt;     &lt;link rel='alternate' type='text/html'         </pre>

<b>O b j e c t i v e</b>	<b>Request</b>
	<pre>href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d4120ee013d4c16166b159c'/&gt;   &lt;env:smart-group     xmlns:env="http://www.hp.com/datapal/api/env" name='Oracle 11.2.0 Instances' role='DMA Admins' target-level='Instance'&gt;     &lt;env:expressions&gt;       &lt;env:expression custom-field='Instance.oracle version' operator='starts with' value='11.2.0'/&gt;       &lt;env:expression custom-field='Instance.RDBMS' operator='equals' value='Oracle'/&gt;     &lt;/env:expressions&gt;   &lt;/env:smart-group&gt; &lt;/entry&gt;</pre>
<b>M o d i f y t h e S m a r t G r o u p c r i t e r i a</b>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c16166b159c</p> <p>This example modifies the Smart Group created in the POST example to only include those Oracle Database 11.2.0 instances that are hosted on Linux servers. The membership criteria and name of the Smart Group are modified.</p> <p><b>Request Body:</b></p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:smart-group name='Oracle 11.2.0 Instances on Linux' role='DMA Admins' target-level='Instance'&gt;     &lt;env:expressions&gt;       &lt;env:expression custom-field='Instance.oracle version' operator='starts with' value='11.2.0'/&gt;       &lt;env:expression custom-field='Instance.RDBMS' operator='equals' value='Oracle'/&gt;       &lt;env:expression custom-field='Server.OS' operator='contains' value='Linux'/&gt;     &lt;/env:expressions&gt;   &lt;/env:smart-group&gt; &lt;/entry&gt;</pre> <p><b>Response Body:</b></p> <pre>&lt;entry</pre>



<p><b>O b j e c t i v e</b></p>	<p><b>Request</b></p>
	<pre> xmlns="http://www.w3.org/2005/Atom"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c16166b159c&lt;/id&gt;   &lt;published&gt;2013-03-08T22:33:36Z&lt;/published&gt;   &lt;updated&gt;2013-03-08T22:33:36Z&lt;/updated&gt;   &lt;title&gt;Oracle 11.2.0 Instances on Linux&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c16166b159c'/&gt;   &lt;link rel='edit' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/ff8080813d4120ee013d4c16166b159c'/&gt;   &lt;link rel='alternate' type='text/html'  href='https://DMA1.mycompany.com:8443/dma/env/group/view/ff8080813d4120ee013d4c16166b159c'/&gt;   &lt;link rel='usedby' type='application/atom+xml'  href='https://DMA1.mycompany.com:8443/dma/api/auto/deployment/ff8080813d4120ee013d4c1ceeb51733'   title='RunOracleComplianceAudit_11.2.0_instances'/&gt;   &lt;env:smart-group     xmlns:env="http://www.hp.com/datapal/api/env" name='Oracle 11.2.0 Instances on Linux' role='DMA Admins' target-level='Instance'&gt;     &lt;env:expressions&gt;       &lt;env:expression custom-field='Instance.oracle version' operator='starts with' value='11.2.0'/&gt;       &lt;env:expression custom-field='Instance.RDBMS' operator='equals' value='Oracle'/&gt;       &lt;env:expression custom-field='Server.OS' operator='contains' value='Linux'/&gt;     &lt;/env:expressions&gt;   &lt;/env:smart-group&gt; &lt;/entry&gt; </pre>
<p><b>D e l e t e a S m a r t</b></p>	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/smartgroup/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/env/smartgroup/fff8080813d4120ee013d4c16166b159c</p> <p>No response body is returned. The result is indicated in the return code.</p>

O b j e c t i v e	Request
G r o u p	

## Custom Fields API

Custom Fields are used to customize workflows or show information about the environment. Custom Fields can be used in workflow steps to automatically supply information that is specific to an organization, server, instance, or database.

The Custom Field API provides a mechanism that enables you to read, create, modify, and delete HPE DMA Custom Fields. The capabilities associated with your role determine which Custom Field API operations you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/env/customfield By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	env
Response Object	customfield

### Supported HTTP Methods

GET, PUT, POST, DELETE

### Content Type

application/atom+xml

### Permissions and Constraints

- Any HPE DMA user can create, modify, or delete a Custom Field.
- Custom Fields are associated with an object type (organization, server, instance, or database).
- Valid Custom Field types are text, multi-line, and list.
- Custom Field names must contain one or more characters, and they cannot contain periods(.) or

backslashes (\).

- Custom Field names must be unique for each object type (organization, server, instance, or database).
- If the name of a Custom Field contains the string "password," its value will be masked in the Response Body.
- A Custom Field cannot be renamed.
- You cannot change the type (text, multi-line, or list) of an existing Custom Field.
- You cannot change the object type (organization, server, instance, or database).
- Options can only be set for a Custom Field of type "list."
- Custom Fields that are used by one or more workflows, steps, deployments, or Smart Groups cannot be deleted.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET not valid for PUT, POST, DELETE	Name of the Custom Field to GET. Custom Fields must have non-empty unique names when they are created or modified.  Example: oracle_sid
<b>object</b>	required for POST optional for GET not valid for PUT or DELETE	Custom Field object type (Organization, Server, Instance, or Database) for the GET or POST.  Example: Organization

## Object Identifier

When you want to modify (PUT) or DELETE a specific Custom Field, you must specify the object ID in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/env/customfield/<id>`

Name	Required	Description
<b>id</b>	optional for GET required for PUT, DELETE	Unique alpha-numeric identifier of the Custom Field  Example: ff8080813d03d941013d108785291143

**Tip:** You can specify the object ID for a GET operation instead of specifying the query parameters.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.

Code	Meaning
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all Custom Fields	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/customfield</p> <p>Response Body (only three entries are shown here):</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;</pre>

Objective	Request
	<pre> &lt;updated&gt;2013-02-25T23:47:39Z&lt;/updated&gt; &lt;title&gt;Custom Fields&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield'/&gt; 0813d03d941013d04af726c1e6e' /&gt;     &lt;env:custom-field name='opatch' object='Instance' type='text' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d0 4af72691e6c&lt;/id&gt;     &lt;published&gt;2013-02-25T23:47:39Z&lt;/published&gt;     &lt;updated&gt;2013-02-23T01:33:59Z&lt;/updated&gt;     &lt;title&gt;oracle home&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04af72691e6c' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04af72691e6c' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d0 4af72691e6c' /&gt;     &lt;env:custom-field name='oracle home' object='Instance' type='text' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d0 4c9c42d3035&lt;/id&gt;     &lt;published&gt;2013-02-25T23:47:39Z&lt;/published&gt;     &lt;updated&gt;2013-02-23T02:02:44Z&lt;/updated&gt;     &lt;title&gt;oracle sid&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04c9c42d3035' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04c9c42d3035' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d0 4c9c42d3035' /&gt;     &lt;env:custom-field name='oracle sid' object='Instance' type='text' /&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d0 </pre>

Objective	Request
	<pre> MA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d04af726e1e6 f' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04af726e1e6f' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d0 4af726e1e6f' /&gt;     &lt;env:custom-field name='oracle version' object='Instance' type='text' /&gt;   &lt;/entry&gt;  ... <i>only three entries are shown here</i> </pre>
<p>Get a specific Custom Field by ID</p>	<pre> GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield/&lt;id&gt;  <b>Example:</b> GET https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d04af72 691e6c  Response Body: &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T00:08:42Z&lt;/updated&gt;   &lt;title&gt;Custom Fields&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d0 4af72691e6c&lt;/id&gt;     &lt;published&gt;2013-02-26T00:08:42Z&lt;/published&gt;     &lt;updated&gt;2013-02-23T01:33:59Z&lt;/updated&gt;     &lt;title&gt;oracle home&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04af72691e6c' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013 d04af72691e6c' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d0 </pre>

Objective	Request
	<pre>4af72691e6c' /&gt;     &lt;env:custom-field name='oracle home' object='Instance' type='text' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Get a specific Custom Field by name</p>	<p>GET <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield?name=&lt;custom field name&gt;&amp;object=&lt;object type&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield?name=&lt;custom field name&gt;&amp;object=&lt;object type&gt;</a></p> <p><b>Example:</b></p> <p>GET <a href="https://DMA1.mycompany.com:8443/dma/api/env/customfield?name=oracle%20home&amp;object=Instance">https://DMA1.mycompany.com:8443/dma/api/env/customfield?name=oracle%20home&amp;object=Instance</a></p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T00:11:34Z&lt;/updated&gt;   &lt;title&gt;Custom Fields&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d04af72691e6c&lt;/id&gt;   &lt;published&gt;2013-02-26T00:11:34Z&lt;/published&gt;   &lt;updated&gt;2013-02-23T01:33:59Z&lt;/updated&gt;   &lt;title&gt;oracle home&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d04af72691e6c' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d04af72691e6c' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d04af72691e6c' /&gt;     &lt;env:custom-field name='oracle home' object='Instance' type='text' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Create a</p>	<p>POST <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield?object=&lt;object type&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield?object=&lt;object type&gt;</a></p> <p><b>Example:</b></p>

Objective	Request
<p>new Custom Field</p>	<p>POST https://DMA1.mycompany.com:8443/dma/api/env/customfield?object=Organization</p> <p>Request Body:</p> <pre>&lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:custom-field name='Org Info' object='Organization' type='list'&gt;     &lt;env:options&gt;       &lt;env:option&gt;Physical Location&lt;/env:option&gt;       &lt;env:option&gt;Business Unit&lt;/env:option&gt;       &lt;env:option&gt;Owner&lt;/env:option&gt;     &lt;/env:options&gt;   &lt;/env:custom-field&gt; &lt;/entry&gt;  &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7&lt;/id&gt;   &lt;published&gt;2013-02-26T00:47:46Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T00:47:46Z&lt;/updated&gt;   &lt;title&gt;Org Info&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;env:custom-field name='Org Info' object='Organization' type='list'&gt;     &lt;env:options&gt;       &lt;env:option&gt;Physical Location&lt;/env:option&gt;       &lt;env:option&gt;Business Unit&lt;/env:option&gt;       &lt;env:option&gt;Owner&lt;/env:option&gt;     &lt;/env:options&gt;   &lt;/env:custom-field&gt; &lt;/entry&gt;</pre>
<p>Modify an existing Custom</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7</p> <p>This example adds an item (option) to the Custom Field created in the previous example.</p>



Objective	Request
tom Field	<p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:env="http://www.hp.com/datapal/api/env"&gt;   &lt;env:custom-field name='Org Info' object='Organization' type='list'&gt;     &lt;env:options&gt;       &lt;env:option&gt;Physical Location&lt;/env:option&gt;       &lt;env:option&gt;Business Unit&lt;/env:option&gt;       &lt;env:option&gt;Owner&lt;/env:option&gt;       &lt;env:option&gt;Emergency Contact&lt;/env:option&gt;     &lt;/env:options&gt;   &lt;/env:custom-field&gt; &lt;/entry&gt;  &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:env="http://www.hp.com/datapal/api/env"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7&lt;/id&gt;   &lt;published&gt;2013-02-26T00:51:55Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T00:47:46Z&lt;/updated&gt;   &lt;title&gt;Org Info&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/env/metadata/view/ff8080813d03d941013d13f8338924e7' /&gt;   &lt;env:custom-field name='Org Info' object='Organization' type='list'&gt;     &lt;env:options&gt;       &lt;env:option&gt;Physical Location&lt;/env:option&gt;       &lt;env:option&gt;Business Unit&lt;/env:option&gt;       &lt;env:option&gt;Owner&lt;/env:option&gt;       &lt;env:option&gt;Emergency Contact&lt;/env:option&gt;     &lt;/env:options&gt;   &lt;/env:custom-field&gt; &lt;/entry&gt; </pre>
Delete an existing Cus	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/customfield/&lt;id&gt;</p> <p><b>Example:</b></p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/env/customfield/ff8080813d03d941013d13f8338924e7</p>

Objective	Request
tom Field	No response body is returned.

**Note:** Some HPE DMA workflows create special Custom Fields that are not visible in the HPE DMA UI. These Custom Fields are listed in the Response Body when you perform a GET or PUT using the Instance API or Custom Field API. The names of these special Custom Fields begin with a double underscore. For example:

```

    <env:custom-field name='__compliance - oracle - 9_12 - verify access to any
dba_ views' value=''/>
    <env:custom-field name='__compliance - oracle - 9_18 - verify access to dba_
tab_privs' value=''/>
    <env:custom-field name='__compliance - oracle - 9_15 - verify access to dba_
roles' value=''/>
    <env:custom-field name='__compliance - oracle - 9_35 - verify grants to
create procedure' value=''/>
    <env:custom-field name='__compliance - oracle - 9_33 - verify grants to
create library' value=''/>
    <env:custom-field name='__compliance - oracle - 8_06 - password grace time'
value=''/>

```

These special Custom Fields are not shown in the examples above.

## Unassigned Servers API

Servers that are available to be managed by HPE DMA but are not assigned to an organization are called "unassigned servers."

The Unassigned Server API provides a mechanism that you can use to list the unassigned servers in your environment. You can then add the unassigned servers to the HPE DMA environment by using the ["Servers API"](#) API.

**Tip:** You can create and periodically run a script that looks for unassigned servers and then adds them to the HPE DMA environment.

### Resource Information

Resource URL	<p>https://&lt;DMAServer&gt;:&lt;port&gt;/dma/api/env/unassignedserver</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML

Resource Family	env
Response Object	unassignedserver

## Supported HTTP Methods

GET

## Content Type

application/atom+xml

## Permissions and Constraints

Only HPE DMA users who have a role with Administrator capability can list unassigned servers.

## Query Parameters

Name	Required	Description
<b>filter</b>	optional	Only those servers whose names contain the string specified in the filter parameter are returned in the list  Example: mycompany.com

## Object Identifier

When you want to GET information about a specific unassigned server, you must specify the object ID in the URL. For example:

GET https://<DMA server>:<port>/dma/api/env/unassignedserver/<id>

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the unassigned server  Example: 4050001

## Return Codes

Code	Meaning
200 SC_OK	The GET was successfully completed.
400 SC_BAD_REQUEST	The GET cannot be completed due to a problem in the request.
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.

Code	Meaning
	NOTE: HPE DMA uses HTTP Basic authentication.
405 SC_NOT_ALLOWED	The resource does not support the specified method (PUT, POST, or DELETE).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

**Tip:** To list all servers that a specific organization contains, see ["Organizations API" on page 90](#).

Objective	Request
Get a list of all unassigned servers	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/unassignedserver</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver</p> <p>Response Body:</p> <pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;feed   xmlns="http://www.w3.org/2005/Atom"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T12:49:35Z&lt;/updated&gt;   &lt;title&gt;Unassigned Servers&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4050001&lt;/id&gt;   &lt;published&gt;2013-02-26T12:49:35Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T12:49:35Z&lt;/updated&gt;   &lt;title&gt;serverABC.mycompany.com&lt;/title&gt;   &lt;link link='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4050001' /&gt;   &lt;/entry&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4040001&lt;/id&gt;   &lt;published&gt;2013-02-26T12:49:35Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T12:49:35Z&lt;/updated&gt;   &lt;title&gt;serverXYZ.mycompany.com&lt;/title&gt;   &lt;link link='self' type='application/atom+xml'</pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4040001' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Get a specific unassigned server by specifying its ID</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/unassignedserver/&lt;id&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4040001</p> <p>Response Body:</p> <pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;feed   xmlns="http://www.w3.org/2005/Atom"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T12:52:18Z&lt;/updated&gt;   &lt;title&gt;Unassigned Servers&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4040001&lt;/id&gt;   &lt;published&gt;2013-02-26T12:52:18Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T12:52:18Z&lt;/updated&gt;   &lt;title&gt;serverXYZ.mycompany.com&lt;/title&gt;   &lt;link link='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4040001' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Get a list of unassigned servers whose name contains the string 'target'</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/env/unassignedserver?filter=&lt;filter string&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver?filter=ABC</p> <p>Response Body:</p> <pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;feed   xmlns="http://www.w3.org/2005/Atom"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T12:51:30Z&lt;/updated&gt;   &lt;title&gt;Unassigned Servers&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml'</pre>

Objective	Request
	<pre>href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4050001&lt;/id&gt;     &lt;published&gt;2013-02-26T12:51:30Z&lt;/published&gt;     &lt;updated&gt;2013-02-26T12:51:30Z&lt;/updated&gt;     &lt;title&gt;serverABC.mycompany.com&lt;/title&gt;     &lt;link link='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/env/unassignedserver/4050001' /&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>

## Roles API

Each HPE DMA user has one or more roles. Roles are used to grant users permission to log in to HPE DMA and to access specific automation items and organizations.

Roles are defined in your server management tool. They are then registered in HPE DMA. After a role has been registered, it can be used to assign permissions and capabilities.

The Role API provides a mechanism that enables you perform the following tasks:

- List all registered roles.
- Get information about a specific registered role.
- List all available roles—roles that are defined in your server management tool but are not registered in HPE DMA.
- Get information about a specific available role.
- Register an available role.
- Unregister a role (return it to the available list).

The capabilities associated with your role determine which Role API operations that you are permitted to perform (see "[Permissions and Constraints](#)").

### Resource Information

Resource URL	https://<DMA Server>:<port>/dma/api/setup/role By default, the port for HTTPS communication in HPE DMA is 8443.
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	setup
Response Object	role

## Supported HTTP Methods

GET, PUT, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

Only HPE DMA users who have at least one role with Administrator capability can use the Role API.

## Query Parameters

Name	Required	Description
name	optional for GET	Name of the role that you want to GET
	Not valid for PUT, POST, DELETE	Example: DMA%20Admins

## Object Identifier

When you want to modify (PUT) a registered role or unregister (DELETE) a role, you must specify the object ID for that role in the URL. For example:

PUT `https://<DMA server>:<port>/dma/api/setup/role/<id>`

Name	Required	Description
id	optional for GET	Unique alpha-numeric identifier of the role
	required for PUT or DELETE	Example: ff8443813bfd79c7013bfd7a53d10000

You can also specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.

Code	Meaning
	NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all registered roles	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T17:53:22Z&lt;/updated&gt;   &lt;title&gt;Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23e bd0000&lt;/id&gt;     &lt;published&gt;2013-02-21T17:53:22Z&lt;/published&gt;     &lt;title&gt;OS Deployers&lt;/title&gt;</pre>



Objective	Request
	<pre> &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3ebd0000' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3ebd0000' /&gt; &lt;setup:role name='OS Deployers' roleIdentifier='4490001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='OS Deployers'&gt;   &lt;setup:description&gt;Access to provision servers.&lt;/setup:description&gt; &lt;/setup:role&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23e e70001&lt;/id&gt;   &lt;published&gt;2013-02-21T17:53:22Z&lt;/published&gt;   &lt;title&gt;Superusers&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3ee70001' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3ee70001' /&gt;   &lt;setup:role name='Superusers' roleIdentifier='4450001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Superusers'&gt;     &lt;setup:description&gt;Complete access to all SA-managed objects and operations.&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23e ec0002&lt;/id&gt;   &lt;published&gt;2013-02-21T17:53:22Z&lt;/published&gt;   &lt;title&gt;DMA Users&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3eec0002' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3eec0002' /&gt;   &lt;setup:role name='DMA Users' roleIdentifier='5620001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Users'&gt;     &lt;setup:description&gt;&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; </pre>

Objective	Request
	<p>...</p> <p><i>only the first three registered roles are shown here</i></p>
<p>List all available roles</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/available</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role/available</p> <p>These are the roles that are defined in your server management tool but are not registered in HPE DMA.</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/available&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T17:57:27Z&lt;/updated&gt;   &lt;title&gt;Available Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/available' /&gt;   &lt;entry&gt;     &lt;id&gt;ff8080813cfda070013cfda160ed0001--4540001&lt;/id&gt;     &lt;published&gt;2013-02-21T17:57:27Z&lt;/published&gt;     &lt;title&gt;Compliance Policy Setters&lt;/title&gt;     &lt;setup:role name='Compliance Policy Setters' roleIdentifier='4540001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Compliance Policy Setters'&gt;       &lt;setup:description&gt;Access to define compliance policies.&lt;/setup:description&gt;     &lt;/setup:role&gt;   &lt;/entry&gt;   &lt;entry&gt;     &lt;id&gt;ff8080813cfda070013cfda160ed0001--4500001&lt;/id&gt;     &lt;published&gt;2013-02-21T17:57:27Z&lt;/published&gt;     &lt;title&gt;Patch Policy Setters&lt;/title&gt;     &lt;setup:role name='Patch Policy Setters' roleIdentifier='4500001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Patch Policy Setters'&gt;       &lt;setup:description&gt;Access to set patching policy.&lt;/setup:description&gt;     &lt;/setup:role&gt;   &lt;/entry&gt;   &lt;entry&gt;     &lt;id&gt;ff8080813cfda070013cfda160ed0001--4520001&lt;/id&gt;     &lt;published&gt;2013-02-21T17:57:27Z&lt;/published&gt; </pre>

Objective	Request
	<pre> &lt;title&gt;Software Policy Setters&lt;/title&gt; &lt;setup:role name='Software Policy Setters' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;   &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt; &lt;/setup:role&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get detailed information about a specific registered role by ID</p>	<p>GET <a href="https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/&lt;role id&gt;">https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/&lt;role id&gt;</a></p> <p><b>Example:</b></p> <p>GET <a href="https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23efe0005">https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23efe0005</a></p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:00:14Z&lt;/updated&gt;   &lt;title&gt;Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23efe0005&lt;/id&gt;     &lt;published&gt;2013-02-21T18:00:14Z&lt;/published&gt;     &lt;title&gt;DMA Workflow Designers&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23efe0005' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23efe0005' /&gt;     &lt;setup:role name='DMA Workflow Designers' roleIdentifier='6430001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Workflow Designers'&gt;       &lt;setup:description&gt;DMA users who can write workflows&lt;/setup:description&gt;     &lt;/setup:role&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>

Objective	Request
<p>Get summary information about a specific registered role by name</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role?name=&lt;Role name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role?name=DMA%20Admins</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:00:43Z&lt;/updated&gt;   &lt;title&gt;Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23f47000d&lt;/id&gt;     &lt;published&gt;2013-02-21T18:00:43Z&lt;/published&gt;     &lt;title&gt;DMA Admins&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23f47000d' /&gt;     &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23f47000d' /&gt;     &lt;setup:role name='DMA Admins' roleIdentifier='5610001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Admins'&gt;       &lt;setup:description&gt;&lt;/setup:description&gt;     &lt;/setup:role&gt;   &lt;/entry&gt; &lt;/feed&gt;</pre>
<p>Get summary information about a spe</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/available?name=&lt;Role name&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role/available?name=Compliance%20Policy%20Setters</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;</pre>

Objective	Request
<p>cific available role by name</p>	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/available&lt;/id&gt; &lt;author&gt;   &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-21T18:02:08Z&lt;/updated&gt; &lt;title&gt;Available Roles&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/available' /&gt; &lt;entry&gt;   &lt;id&gt;ff8080813cfda070013cfda160ed0001--4540001&lt;/id&gt;   &lt;published&gt;2013-02-21T18:02:08Z&lt;/published&gt;   &lt;title&gt;Compliance Policy Setters&lt;/title&gt;   &lt;setup:role name='Compliance Policy Setters' roleIdentifier='4540001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Compliance Policy Setters'&gt;     &lt;setup:description&gt;Access to define compliance policies.&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Get a filtered list of registered roles who see names contain the specified string</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role?filter=&lt;Filter string&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role?filter=DMA</p> <p>Response Body:</p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:02:57Z&lt;/updated&gt;   &lt;title&gt;Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23e ec0002&lt;/id&gt;     &lt;published&gt;2013-02-21T18:02:57Z&lt;/published&gt;     &lt;title&gt;DMA Users&lt;/title&gt; </pre>

Objective	Request
	<pre>                 &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3eec0002' /&gt;                 &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3eec0002' /&gt;                 &lt;setup:role name='DMA Users' roleIdentifier='5620001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Users'&gt;                 &lt;setup:description&gt;&lt;/setup:description&gt;                 &lt;/setup:role&gt;         &lt;/entry&gt;         &lt;entry&gt;          &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23e fe0005&lt;/id&gt;                 &lt;published&gt;2013-02-21T18:02:57Z&lt;/published&gt;                 &lt;title&gt;DMA Workflow Designers&lt;/title&gt;                 &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3efe0005' /&gt;                 &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3efe0005' /&gt;                 &lt;setup:role name='DMA Workflow Designers' roleIdentifier='6430001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Workflow Designers'&gt;                 &lt;setup:description&gt;DMA users who can write workflows&lt;/setup:description&gt;                 &lt;/setup:role&gt;         &lt;/entry&gt;         &lt;entry&gt;          &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23f 47000d&lt;/id&gt;                 &lt;published&gt;2013-02-21T18:02:57Z&lt;/published&gt;                 &lt;title&gt;DMA Admins&lt;/title&gt;                 &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3f47000d' /&gt;                 &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda2 3f47000d' /&gt;                 &lt;setup:role name='DMA Admins' roleIdentifier='5610001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='DMA Admins'&gt;                 &lt;setup:description&gt;&lt;/setup:description&gt;                 &lt;/setup:role&gt; </pre>

Objective	Request
<p>Get a filtered list of available roles who set names contain the specified string</p>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/available?filter=&lt;Filter string&gt;</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role/available?filter=Software</p> <p>Response Body:</p> <pre> feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/available&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:04:01Z&lt;/updated&gt;   &lt;title&gt;Available Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/available' /&gt;   &lt;entry&gt;     &lt;id&gt;ff8080813cfda070013cfda160ed0001-_-4520001&lt;/id&gt;     &lt;published&gt;2013-02-21T18:04:01Z&lt;/published&gt;     &lt;title&gt;Software Policy Setters&lt;/title&gt;     &lt;setup:role name='Software Policy Setters' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;       &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt;     &lt;/setup:role&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>Register an available role</p>	<p>POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role</p> <p><b>Example:</b></p> <p>POST https://DMA1.mycompany.com:8443/dma/api/setup/role</p> <p>Request Body:</p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;title&gt;Software Policy Setters&lt;/title&gt;   &lt;setup:role name='Software Policy Setters' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;     &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; </pre> <p>Response Body:</p>

Objective	Request
	<pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158&lt;/id&gt;   &lt;published&gt;2013-02-21T18:07:29Z&lt;/published&gt;   &lt;title&gt;Software Policy Setters&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158'/&gt;   &lt;setup:role name='Software Policy Setters' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;     &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; </pre>
<p>Modify a registered role</p>	<p>PUT <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/&lt;role id&gt;</code></p> <p><b>Example:</b></p> <p>PUT <code>https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158</code></p> <p>This example changes the name of the role that was registered in the previous example.</p> <p><b>Request Body:</b></p> <pre> &lt;entry xmlns="http://www.w3.org/2005/Atom" xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;title&gt;Software Policy Setters - ALL&lt;/title&gt;   &lt;setup:role name='Software Policy Setters - ALL' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;     &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt;   &lt;/setup:role&gt; &lt;/entry&gt; </pre> <p><b>Response Body:</b></p> <pre> &lt;entry   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158&lt;/id&gt;   &lt;published&gt;2013-02-21T18:11:05Z&lt;/published&gt; </pre>



Objective	Request
	<pre> &lt;title&gt;Software Policy Setters - ALL&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158' /&gt; &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158' /&gt; &lt;setup:role name='Software Policy Setters - ALL' roleIdentifier='4520001' connectorUuid='ff8080813cfda070013cfda160ed0001' fullname='Software Policy Setters'&gt;   &lt;setup:description&gt;Access to set software policy.&lt;/setup:description&gt; &lt;/setup:role&gt; &lt;/entry&gt; </pre>
Unregister a role (return it to the available list)	<p>DELETE <code>https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/&lt;role id&gt;</code></p> <p><b>Example:</b></p> <p>DELETE <code>https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfd04d090158</code></p> <p>This example unregisters the role that we added and then modified in the previous examples.</p> <p>Response Body:</p> <p>This operation does not return a Response Body.</p>

## Capabilities API

Capabilities are collections of related privileges. Capabilities are assigned to one or more registered roles. There are three capabilities defined in HPE DMA:

- Login Access capability enables a user to log in to the HPE DMA web interface. This capability does not guarantee that this user can view any organizations or automation items—permissions are required to access those items.
- Workflow Creator capability enables a user to create new workflows and make copies of other workflows.
- Administrator capability enables a user to perform any HPE DMA action and view all organizations. If you have Administrator capability, you do not need Workflow Creator capability.

The Capability API provides a mechanism that enables you to list all the capabilities and determine which roles have a specific capability.

The capabilities associated with your role determine which Capability API operations that you are permitted to perform (see "[Permissions and Constraints](#)").

## Resource Information

Resource URL	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/setup/capability</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	setup
Response Object	capability

## Supported HTTP Methods

GET, PUT

## Content Type

application/atom+xml

## Permissions and Constraints

Only HPE DMAHPE DMA users who have at least one role with Administrator capability can use the Capability API.

## Query Parameters

Name	Required	Description
<b>name</b>	optional for GET  not valid for PUT	Name of the capability that you want to GET  Example: name?=Workflow%20Creator

## Object Identifier

When you want to modify (PUT) a specific capability, you must specify the object ID in the URL. For example:

PUT https://<DMA server>:<port>/dma/api/setup/capability/<id>

Name	Required	Description
<b>id</b>	optional for GET  required for PUT	Unique alpha-numeric identifier of the capability  Example: ff8443813bfd79c7013bfd7a53d10000

You can also specify the object ID for a GET operation instead of specifying the name parameter.

## Return Codes

**Note:** The following list of return codes pertains to all HPE DMA APIs. The Capability API does not support POST or DELETE.

Code	Meaning
200 SC_OK	The GET, PUT, or DELETE was successfully completed.
201 SC_CREATED	The POST was successfully completed.
400 SC_BAD_REQUEST	The GET, PUT, POST, or DELETE could not be completed due to a problem in the request
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
403 SC_FORBIDDEN	The PUT, POST, or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the GET, PUT, or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method.
409 SC_CONFLICT	For a POST, the object cannot be created because an object with the same name already exists. For a DELETE, the object cannot be deleted because it is in use (for example: a step that is used by a workflow).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
List all capabilities	GET https://<DMA server>:<port>/dma/api/setup/capability  <b>Example:</b> GET https://DMA1.mycompany.com:8443/dma/api/setup/capability  Response Body:

Objective	Request
	<pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:18:05Z&lt;/updated&gt;   &lt;title&gt;Capabilities&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability' /&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/1234567890123456789 0123456789012&lt;/id&gt;   &lt;published&gt;2013-02-21T18:18:05Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;   &lt;title&gt;Administrator&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/12345678901234567 890123456789012' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/12345678901234567 890123456789012' /&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/12345678901234567 890123456789012' /&gt;   &lt;/entry&gt;   &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/2234567890123456789 0123456789012&lt;/id&gt;   &lt;published&gt;2013-02-21T18:18:05Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;   &lt;title&gt;Login Access&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/22345678901234567 890123456789012' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/22345678901234567 890123456789012' /&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/22345678901234567 890123456789012' /&gt;   &lt;/entry&gt;   &lt;entry&gt; </pre>

Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567890123456789012&lt;/id&gt;   &lt;published&gt;2013-02-21T18:18:05Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;   &lt;title&gt;Workflow Creator&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567890123456789012' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567890123456789012' /&gt;   &lt;link rel='alternate' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/323456789012345678901234567890123456789012' /&gt;   &lt;/entry&gt; &lt;/feed&gt; </pre>
<p>           Determine which roles have a particular capability specified by ID         </p>	<p> <b>GET</b> https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/capability/&lt;id&gt;         </p> <p> <b>Example:</b> </p> <p> <b>GET</b> https://DMA1.mycompany.com:8443/dma/api/setup/capability/12345678901234567890123456789012         </p> <p>           This command shows you all the roles that have Administrator capability.         </p> <p> <b>Response Body:</b> </p> <pre> &lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:18:55Z&lt;/updated&gt;   &lt;title&gt;Administrator&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability' /&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/123456789012345678901234567890123456789012&lt;/id&gt;     &lt;published&gt;2013-02-21T18:18:55Z&lt;/published&gt;     &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;     &lt;title&gt;Administrator Roles&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' </pre>



Objective	Request
<p>d by name</p>	<pre> &lt;/author&gt; &lt;updated&gt;2013-02-21T18:20:09Z&lt;/updated&gt; &lt;title&gt;Workflow Creator&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability'/&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/3234567890123456789 0123456789012&lt;/id&gt;   &lt;published&gt;2013-02-21T18:20:09Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;   &lt;title&gt;Workflow Creator Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567 890123456789012'/&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567 890123456789012'/&gt;   &lt;setup:capability name='Workflow Creator'&gt;     &lt;setup:description&gt;This is the DMA workflow capability which allows the user to create workflows&lt;/setup:description&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23eec0002&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f790013&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f39000b&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f2a0009&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f30000a&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23ef20003&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f250008&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f960014&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23fa60016&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f9f0015&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f060006&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23fb10017&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23ebd0000&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f54000f&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f6a0011&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23ee70001&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f730012&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f610010&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f47000d&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23ef70004&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23efe0005&lt;/setup:role&gt;   &lt;/setup:capability&gt; &lt;/entry&gt; &lt;/feed&gt; </pre> <p>To view information about the role to which each &lt;setup:role&gt; element listed corresponds, use</p>

Objective	Request
	<p>the following Role API request:</p> <p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/role/&lt;role id&gt;</p> <p>For example:</p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/role/ff8080813cfda1b2013cfda23eec0002</p>
<p>Modify the collection of roles that have a specific capability</p>	<p>PUT https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/capability/&lt;id&gt;</p> <p><b>Example:</b></p> <p>PUT https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567890123456789012</p> <p>This example limits the number of roles that have Workflow Creator capability to the three roles listed in the Request Body.</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p><b>Caution:</b> You must list <u>all</u> roles that you want to have the specified capability. Only those roles included in the Response Body will have this capability after the PUT is executed.</p> </div> <p>Request Body:</p> <pre>&lt;entry xmlns="https://www.w3.org/2005/Atom" xmlns:setup="https://www.hp.com/dma/api/setup"&gt;   &lt;title&gt;Workflow Creator Roles&lt;/title&gt;   &lt;setup:capability name='Workflow Creator'&gt;     &lt;setup:description&gt;This is the DMA workflow capability which allows the user to create workflows&lt;/setup:description&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23eec0002&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f790013&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f39000b&lt;/setup:role&gt;   &lt;/setup:capability&gt; &lt;/entry&gt;</pre> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-21T18:26:05Z&lt;/updated&gt;   &lt;title&gt;Workflow Creator&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability' /&gt;   &lt;entry&gt;</pre>



Objective	Request
	<pre> &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/capability/3234567890123456789 0123456789012&lt;/id&gt;   &lt;published&gt;2013-02-21T18:26:05Z&lt;/published&gt;   &lt;updated&gt;2013-02-21T16:42:16Z&lt;/updated&gt;   &lt;title&gt;Workflow Creator Roles&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567 890123456789012' /&gt;   &lt;link rel='edit' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/capability/32345678901234567 890123456789012' /&gt;   &lt;setup:capability name='Workflow Creator'&gt;     &lt;setup:description&gt;This is the DMA workflow capability which allows the user to create workflows&lt;/setup:description&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23eec0002&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f39000b&lt;/setup:role&gt;     &lt;setup:role&gt;ff8080813cfda1b2013cfda23f790013&lt;/setup:role&gt;   &lt;/setup:capability&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>

## User API

The User API provides a mechanism that enables you to view your roles and capabilities.

### Resource Information

Resource URL	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/setup/user</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	setup
Response Object	user

### Supported HTTP Methods

GET

## Content Type

application/atom+xml

## Permissions and Constraints

Any user can GET a list of his or her own roles and capabilities.

Because you must specify a user name and password in the authorization header for the GET request, you cannot list another user's roles and capabilities using this API—even if you have a role with Administrator capability.

## Query Parameters

N/A

## Return Codes

Code	Meaning
200 SC_OK	The GET was successfully completed.
400 SC_BAD_REQUEST	The GET cannot be completed due to a problem in the request.
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
405 SC_NOT_ALLOWED	The resource does not support the specified method (PUT, POST, or DELETE).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
Get a list of your roles and capabilities.  <i>You must</i>	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/user</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/user</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/user&lt;/id&gt;</pre>

Objective	Request
<p><i>specify your user name and password in the authorization header of the GET request.</i></p>	<pre> &lt;author&gt;   &lt;name&gt;HPE DMA&lt;/name&gt; &lt;/author&gt; &lt;updated&gt;2013-02-26T12:27:52Z&lt;/updated&gt; &lt;title&gt;login_only_user&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/user'/&gt; &lt;entry&gt;   &lt;id&gt;login_only_role&lt;/id&gt;   &lt;title&gt;login_only_role&lt;/title&gt;   &lt;updated&gt;2013-02-26T12:27:52Z&lt;/updated&gt;   &lt;category&gt;Role&lt;/category&gt; &lt;/entry&gt; &lt;entry&gt;   &lt;id&gt;Login Access&lt;/id&gt;   &lt;title&gt;Login Access&lt;/title&gt;   &lt;updated&gt;2013-02-26T12:27:52Z&lt;/updated&gt;   &lt;category&gt;Capability&lt;/category&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>

## Version API

The Version API provides a mechanism that enables you to determine the HPE DMA version and build information for a specific server.

### Resource Information

Resource URL	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/setup/version</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	setup
Response Object	version

### Supported HTTP Methods

GET

## Content Type

application/atom+xml

## Permissions and Constraints

Any user can read (GET) the HPE DMA version.

## Query Parameters

N/A

## Return Codes

Code	Meaning
200 SC_OK	The GET was successfully completed.
400 SC_BAD_REQUEST	The GET cannot be completed due to a problem in the request.
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.
405 SC_NOT_ALLOWED	The resource does not support the specified method (PUT, POST, or DELETE).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
Get the HPE DMA version	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/setup/version</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/setup/version</p> <p>Response Body:</p> <pre>&lt;feed   xmlns="http://www.w3.org/2005/Atom"   xmlns:setup="http://www.hp.com/dma/api/setup"&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/version&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;</pre>

Objective	Request
	<pre> &lt;updated&gt;2013-02-26T12:32:17Z&lt;/updated&gt; &lt;title&gt;HP Database &amp; Middleware Automation Version&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/version' /&gt; &lt;entry&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/setup/version&lt;/id&gt;   &lt;published&gt;2013-02-26T12:32:17Z&lt;/published&gt;   &lt;updated&gt;2013-02-26T12:32:17Z&lt;/updated&gt;   &lt;title&gt;Version&lt;/title&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/setup/version' /&gt;   &lt;setup:version web-server-version='10.01.0' web-server- revision='33569' repository-version='10.01.0' /&gt; &lt;/entry&gt; &lt;/feed&gt; </pre>

## Solution Packs API

The Solution Pack API provides a mechanism that enables you to determine the following:

- Which HPE DMA solution packs are installed.
- Which workflows are included in a specific solution pack.
- Install or upgrade a Solution Pack.
- Delete a Solution Pack.

### Resource Information

Resource URL	<p>https://&lt;DMA Server&gt;:&lt;port&gt;/dma/api/solution</p> <p>By default, the port for HTTPS communication in HPE DMA is 8443.</p>
Authentication	Basic authentication—requires valid HPE DMA user name and password
Response Format	XML
Resource Family	solution
Response Object	solution

### Supported HTTP Methods

GET, POST, DELETE

## Content Type

application/atom+xml

## Permissions and Constraints

Any user can read (GET) the list of installed solution packs or information about the contents of a specific solution pack.

Only the DMA administrator can install, upgrade, or delete Solution Packs.

## Query Parameters

N/A

## Object Identifier

When you want to GET information about a specific solution pack, you must specify the object ID in the URL. For example:

GET `https://<DMA server>:<port>/dma/api/solution/<id>`

Name	Required	Description
id	optional for GET	Unique alpha-numeric identifier of the solution pack  Example: ff8443813bfd79c7013bfd7a53d10000

When you want to DELETE a specific solution pack, you must specify the object ID in the URL. For example:

DELETE `https://<DMA server>:<port>/dma/api/solution/<id>`

Name	Required	Description
id	optional for DELETE	Unique alpha-numeric identifier of the solution pack  Example: ff8443813bfd79c7013bfd7a53d10000

## Return Codes

Code	Meaning
200 SC_OK	The GET was successfully completed.
400 SC_BAD_REQUEST	The GET cannot be completed due to a problem in the request.
401 SC_UNAUTHORIZED	The user making the request did not specify credentials (user name and password), or the credentials were invalid.  NOTE: HPE DMA uses HTTP Basic authentication.

Code	Meaning
403 SC_FORBIDDEN	The POST or DELETE could not be completed, because the user does not have write permission for that object, or because the object is locked.
404 SC_NOT_FOUND	The target object for the POST or DELETE does not exist, or the user does not have read permission for that object.
405 SC_NOT_ALLOWED	The resource does not support the specified method (PUT, POST, or DELETE).

## Supported Requests

In the following table, the notation *<something>* indicates a placeholder for a specific piece of information. For example, *<DMA server>* is the host name or IP address of your HPE DMA server.

Objective	Request
Get a list of the HPE DMA solution packs that are currently installed	<p>GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/solution</p> <p><b>Example:</b></p> <p>GET https://DMA1.mycompany.com:8443/dma/api/solution</p> <p>Response Body:</p> <pre>&lt;feed   xmlns='http://www.w3.org/2005/Atom'   xmlns:solution='http://www.hp.com/dma/api/solution'&gt;   &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/solution&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt;   &lt;/author&gt;   &lt;updated&gt;2013-02-26T12:37:10Z&lt;/updated&gt;   &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/solution' /&gt;   &lt;title&gt;Solutions Packs&lt;/title&gt;   &lt;entry&gt;    &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d0430df013d0430e5950005&lt;/id&gt;     &lt;published&gt;2013-02-26T12:37:10Z&lt;/published&gt;     &lt;updated&gt;2013-02-22T23:15:45Z&lt;/updated&gt;     &lt;title&gt;HPE DMA Advanced Database Patching Solution Pack&lt;/title&gt;     &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d0430df013d0430e5950005' /&gt;     &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/solution/installed/view/ff8080813d0430df013d0430e5950005' /&gt;</pre>

Objective	Request
	<pre>                 &lt;solution:description&gt;Oracle Database Patching - Apply patchset to an Oracle CRS - Apply Rolling CPU patch to RAC  Build 33593&lt;/solution:description&gt;             &lt;/entry&gt;         &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d043214013d04321a fa0002&lt;/id&gt;                 &lt;published&gt;2013-02-26T12:37:10Z&lt;/published&gt;                 &lt;updated&gt;2013-02-22T23:17:04Z&lt;/updated&gt;                 &lt;title&gt;HPE DMA Advanced Database Provisioning Solution Pack&lt;/title&gt;                 &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d043214013d0432 1afa0002' /&gt;                 &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/solution/installed/view/ff8080813d043 214013d04321afa0002' /&gt;                 &lt;solution:description&gt;Provides advanced Oracle provisioning capabilities including CRS, ASM, and                 RAC abilities as well as Data Guard. Includes support for 11.2 RAC  Build 33593&lt;/solution:description&gt;             &lt;/entry&gt;  ... <i>only the first two entries are shown here</i> </pre>
<p>Get a list of workflows included in a specific solution pack by ID</p>	<pre> GET https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/solution/&lt;id&gt;  <b>Example:</b> GET https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d043530013d043537380003  Response Body: &lt;feed   xmlns='http://www.w3.org/2005/Atom'   xmlns:solution='http://www.hp.com/dma/api/solution'   xmlns:sop='http://www.hp.com/dma/api/sop'&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d043530013d043537 380003&lt;/id&gt;   &lt;author&gt;     &lt;name&gt;HPE DMA&lt;/name&gt; </pre>



Objective	Request
	<pre> &lt;/author&gt; &lt;published&gt;2013-02-26T12:38:45Z&lt;/published&gt; &lt;updated&gt;2013-02-22T23:20:28Z&lt;/updated&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/solution/ff8080813d043530013d0435 37380003' /&gt; &lt;title&gt;HPE DMA Database Compliance Solution Pack&lt;/title&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d043556ba046 a&lt;/id&gt; &lt;published&gt;2013-02-26T12:38:45Z&lt;/published&gt; &lt;updated&gt;2013-02-22T23:20:37Z&lt;/updated&gt; &lt;title&gt;Run MS SQL Compliance Audit&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d043556ba0 46a' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d043530013 d043556ba046a' /&gt; &lt;sop:description&gt;&lt;/sop:description&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d04355284035 7&lt;/id&gt; &lt;published&gt;2013-02-26T12:38:45Z&lt;/published&gt; &lt;updated&gt;2013-02-22T23:20:36Z&lt;/updated&gt; &lt;title&gt;Run Oracle Compliance Audit&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d043552840 357' /&gt; &lt;link rel='alternate' type='text/html' href='https://DMA1.mycompany.com:8443/dma/sop/workflow/view/ff8080813d043530013 d043552840357' /&gt; &lt;sop:description&gt;&lt;/sop:description&gt; &lt;/entry&gt; &lt;entry&gt;  &lt;id&gt;https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d043559fc050 6&lt;/id&gt; &lt;published&gt;2013-02-26T12:38:45Z&lt;/published&gt; &lt;updated&gt;2013-02-22T23:20:38Z&lt;/updated&gt; &lt;title&gt;Run Sybase Compliance Audit&lt;/title&gt; &lt;link rel='self' type='application/atom+xml' href='https://DMA1.mycompany.com:8443/dma/api/sop/ff8080813d043530013d043559fc0 506' /&gt; </pre>

Objective	Request
Install/Upgrade a Solution Pack	<pre>                     POST https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/solution                     POST https://DMA1.mycompany.com:8443/dma/api/solution                     Request Body:                     &lt;entry xmlns="http://www.w3.org/2005/Atom"                     xmlns:solution="http://www.hp.com/dma/api/solution"&gt;                     &lt;solution:solution path="path_to_solution_pack_file"&gt;                     &lt;/solution:solution&gt;                     &lt;/entry&gt;                     </pre> <div style="background-color: #f0f0f0; padding: 5px;"> <p><b>Note:</b> The path should be absolute, and the file should be present on the DMA server under temp directory.</p> </div> <pre>                     Response Body:                     &lt;feed xmlns="http://www.w3.org/2005/Atom"                     xmlns:solution="http://www.hp.com/dma/api/solution"&gt;                     &lt;entry&gt;                     &lt;id&gt;https://iwfvm01374.hpswlab.adapps.hp.com:8443/dma/api/solution/9037dd2e4e725194014e725199c40004&lt;/id&gt;                     &lt;published&gt;2015-07-09T10:17:07Z&lt;/published&gt;                     &lt;updated&gt;2015-07-22T09:51:28Z&lt;/updated&gt;                     &lt;title&gt;HPE DMA Discovery Solution Pack&lt;/title&gt;                     &lt;link rel='self' type='application/atom+xml'                     href='https://iwfvm01374.hpswlab.adapps.hp.com:8443/dma/api/solution/9037dd2e4e725194014e725199c40004'/&gt;                     &lt;link rel='alternate' type='text/html'                     href='https://iwfvm01374.hpswlab.adapps.hp.com:8443/dma/solution/installed/view/9037dd2e4e725194014e725199c40004'/&gt;                     &lt;solution:solution name='HPE DMA Discovery Solution Pack'                     version='10.40.001.000'&gt;                     &lt;solution:description&gt;Discovers Oracle, Sybase and SQL Server databases on target servers. Also discovers WebSphere and WebLogic middleware applications on target servers.                     46701&lt;/solution:description&gt;                     &lt;/solution:solution&gt;                     &lt;/entry&gt;                     </pre>

Objective	Request
	</feed>
Delete an existing Solution Pack	<p>DELETE https://&lt;DMA server&gt;:&lt;port&gt;/dma/api/solution/&lt;id&gt;</p> <p>DELETE https://DMA1.mycompany.com:8443/dma/api/solution/9037dd2e4e725194014e725199c40004</p> <p>Solution Pack deleted successfully</p>

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