



Workflows

ONTAP Automation

NetApp
September 24, 2021

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Workflows

You can use the ONTAP REST API to administer ONTAP systems and perform other storage administrative tasks. Each of the tasks is described using a workflow process consisting of one or more API calls.

Preparing to use the workflow processes

You should prepare before using the workflow processes.

Understanding the API calls used in the workflows

The ONTAP API online documentation page includes the details of every REST API call. Rather than repeat those details here, each API call used in the workflow samples includes only the information you need to locate the call on the documentation page. After locating a specific API call, you can review the complete details of the call, including the input parameters, output formats, HTTP status codes, and request processing type.

The following information is included for each API call within a workflow to help locate the call on the documentation page:

- Category

The API calls are organized on the documentation page into functionally related areas or categories. To locate a specific API call, scroll to the bottom of the page and click the applicable API category.

- HTTP method

The HTTP method identifies the action performed on a resource. Each API call is executed through a single HTTP method.

- Path

The path determines the specific resource which the action applies to as part of performing a call. The path string is appended to the core URL to form the complete URL identifying the resource.

Constructing a URL to directly access the REST API

In addition to the ONTAP documentation page, you can also access the ONTAP REST API directly through a programming language such as Python. In this case, the core URL is slightly different than the URL used when accessing the online documentation page. When accessing the API directly, you must append `/api` to the domain and port string. For example: <https://ontap.mycompany.com/api>

Related links

[How to access the ONTAP API](#)

[Summary of the REST resource categories](#)

Workflow 1: Updating the cluster contact and checking job state

This workflow updates the cluster contact information. Because the request is processed asynchronously, it also illustrates how to determine if the background job completes successfully.

1. Update the contact information for the cluster

You can issue an API call to update the contact information. Because the request runs asynchronously, you must confirm success of the associated job.

Category	HTTP method	Path
Cluster	PATCH	/cluster

Processing type

Asynchronous

Curl

```
1 curl -X PATCH -H 'Content-Type: application/json' -u admin:password -k
  -d @step01 'https://10.222.81.101/api/cluster'
2 {
3   "contact": "support@company-demo.com"
4 }
```

JSON output

A job object with the associated identifier is returned.

```
1 { "job": {
2   "uuid": "d877f5bb-3aa7-11e9-b6c6-005056a78c89",
3   "_links": {
4     "self": {
5       "href": "/api/cluster/jobs/d877f5bb-3aa7-11e9-b6c6-005056a78c89"
6     }
7   }
8 }
9 }
```

2. Retrieve the status of the job

You must retrieve the state of the job to determine if the asynchronous request has completed successfully.

Category	HTTP method	Path
Cluster	GET	/cluster/jobs/{uuid}

Processing type

Synchronous

Curl

```
1 curl -X GET -H 'Content-Type: application/json' -u admin:password -k  
  'https:// 10.222.81.101/api/cluster/jobs/*uuid*'
```

Output

A job object with the state and other fields is returned.

```
1 {  
2   "uuid": "d877f5bb-3aa7-11e9-b6c6-005056a78c89",  
3   "description": "PATCH /api/cluster",  
4   "state": "success",  
5   "message": "success",  
6   "code": 0,  
7   "_links": {  
8     "self": {  
9       "href": "/api/cluster/jobs/d877f5bb-3aa7-11e9-b6c6-005056a78c89"  
10    }  
11  }  
12 }
```

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