Interpretation of an API response

SnapCenter Software

Soumik Das
June 09, 2021

Table of Contents

Interpretation of an API response

Each API request generates a response back to the client. You should examine the response to determine whether it was successful and retrieve additional data as needed.

HTTP status code

The HTTP status codes used by the SnapCenter REST API are described below.

Code	Description
200	OK Indicates success for calls that do not create a new object.
201	Created An object is successfully created. The location header in the response includes the unique identifier for the object.
202	Accepted A background job has been started to perform the request, but has not completed yet.
400	Bad request The request input is not recognized or is inappropriate.
401	Unauthorized User authentication has failed.
403	Forbidden Access is denied due to an authorization (RBAC) error.
404	Not found The resource referred to in the request does not exist.
405	Method not allowed The HTTP method in the request is not supported for the resource.
409	Conflict An attempt to create an object failed because a different object must be created first or the requested object already exists.

Code	Description
500	Internal error A general internal error occurred at the server.

Response headers

Several headers are included in the HTTP response generated by the SnapCenter.

Location

When an object is created, the location header includes the complete URL to the new object including the unique identifier assigned to the object.

Content-type

This will normally be `application/json`.

Response body

The content of the response body resulting from an API request differs based on the object, processing type, and the success or failure of the request. The response is always rendered in JSON.

Single object

A single object can be returned with a set of fields based on the request. For example, you can use GET to retrieve selected properties of a cluster using the unique identifier.

Multiple objects

Multiple objects from a resource collection can be returned. In all cases, there is a consistent format used, with `num_records` indicating the number of records and records containing an array of the object instances. For example, you can retrieve the nodes defined in a specific cluster.

Job object

If an API call is processed asynchronously, a Job object is returned which anchors the background task. For example, the PATCH request used to update the cluster configuration is processed asynchronously and returns a Job object.

Error object

If an error occurs, an Error object is always returned. For example, you will receive an error when attempting to change a field not defined for a cluster.

Empty

In certain cases, no data is returned and the response body includes an empty JSON object.

Errors

If an error occurs, an error object is returned in the response body.

Format

An error object has the following format:

```
"error": {
"message": "<string>",
"code": <integer>[,
"target": "<string>"]
}
```

You can use the code value to determine the general error type or category, and the message to determine the specific error. When available, the target field includes the specific user input associated with the error.

Common error codes

The common error codes are described in the following table. Specific API calls can include additional error codes.

Code	Description
409	An object with the same identifier already exists.
400	The value for a field has an invalid value or is missing, or an extra field was provided.
400	The operation is not supported.
405	An object with the specified identifier cannot be not found.
403	Permission to perform the request is denied.
409	The resource is in use.