Manage API tasks

A task is an API operation that is performed asynchronously because it exceeds the time allowed for the synchronous request/response model.

Examples of API operations that use tasks are:

- create subscription
- create database
- update database
- delete database

All create, update, and delete API operations (POST, PUT, and DELETE) and some query operations (GET) use tasks.

After you request an asynchronous operation, the operation returns a taskId that identifies the specific task, and contains contextual and status data on the API operation performed by the task.

Tasks are part of the API processing and provisioning lifecycle.

Task information

When you query a task of an asynchronous API operation, the response to the request includes the task status and additional information about the task:

```json
{
    "taskId": "f3ec0e7b-0548-46e3-82f3-1977012ec738",
    "commandType": "subscriptionCreateRequest",
    "status": "received",
    "description": "Task request received and is being queued for processing. ",
    "timestamp": "2019-08-08T09:07:39.826Z",
    "_links": {
        "task": {
            "href": "https://api.redislabs.com/v1/tasks/f3ec0e7b-0548-46e3-82f3-1977012ec738",
            "title": "getTaskStatusUpdates",
            "type": "GET"
        }
    }
}
```

Where:

- taskId - The unique identifier (UUID) of the specific task
- commandType - The request (command) type
- status - The status of the task
- description - A description of the status
- timestamp - The time of the response in ISO-8601 date format and in the UTC timezone
- _links - URI links to resources related to the task including:
Task status updates

With the task ID, you can query the task status for updates and progress information. The response in the above example shows a URL with the title getTaskStatusUpdates. The URL in the href property returns updates for the specified task.

This request returns the updated status of the task identifier, using the value in the $TASK_ID environment variable:

```
curl -s -X GET "https://$HOST/tasks/$TASK_ID" \
    -H "accept: application/json" \
    -H "x-api-key: $ACCOUNT_KEY" \
    -H "x-api-secret-key: $SECRET_KEY"
```

The response to the getTaskStatusUpdates request shows:

```
{
    "taskId": "36d4b04d-72d4-4404-8600-a223120a553e",
    "commandType": "subscriptionCreateRequest",
    "status": "processing-completed",
    "description": "Request processing completed successfully and its resources are now being provisioned / de-provisioned.",
    "timestamp": "2019-08-08T06:49:15.929Z",
    "response": {
        "resourceId": 77899
    },
    "_links": {
        "resource": {
            "href": "https://api.redislabs.com/v1/subscriptions/77899",
            "title": "getSubscriptionInformation",
            "type": "GET"
        },
        "self": {
            "href": "https://api.redislabs.com/v1/tasks/36d4b04d-72d4-4404-8600-a223120a553e",
            "type": "GET"
        }
    }
}
```

This response example shows:

- The status value is "processing-completed".
- The response field contains the resource identifier of the subscription resource changed by this task.
- The links array contains another getSubscriptionInformation URL that links to the newly created subscription. This link queries the subscription status during provisioning.

Tasks list

You can use the API operation `GET /tasks` to list the recently submitted and completed tasks for the current account.

This API operation returns a list of tasks for the current account, sorted by most recent status update.
curl -s -X GET "https://$HOST/tasks" \
-H "accept: application/json" \
-H "x-api-key: $ACCOUNT_KEY" \
-H "x-api-secret-key: $SECRET_KEY"

The result returns all the tasks submitted during the past 10 days.

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