Postman Test Automation Using Newman

- **Newman** is an open-source command-line tool (built on Node.js) for running and testing Postman Collections outside the Postman GUI
- It supports the same pre-request and test scripts as Postman, making it ideal for automation and CI pipelines.

Overview

This guide provides step-by-step instructions for:

- Writing Pre-request and Post-response scripts in Postman.
- Running the API test collections using Newman, the CLI companion tool for Postman.
- Generating HTML test reports.

Prerequisites

- Postman installed: https://www.postman.com/downloads/
- Node.js installed: https://nodejs.org/
- Newman installed via npm:

```
npm install -g newman
```

1. Creating Pre-request and Test Scripts in Postman

1.1 Create a Collection and Add Request

- Open Postman.
- Click "Collections" → "New Collection" → Name it.
- Add a request (e.g., a GET or POST request) to your collection.

1.2 Pre-request Script

A Pre-request Script is JavaScript code that executes *before* an API request is sent. It enables you to set up variables, generate dynamic data, and configure request parameters such as headers or authentication tokens.

Steps:

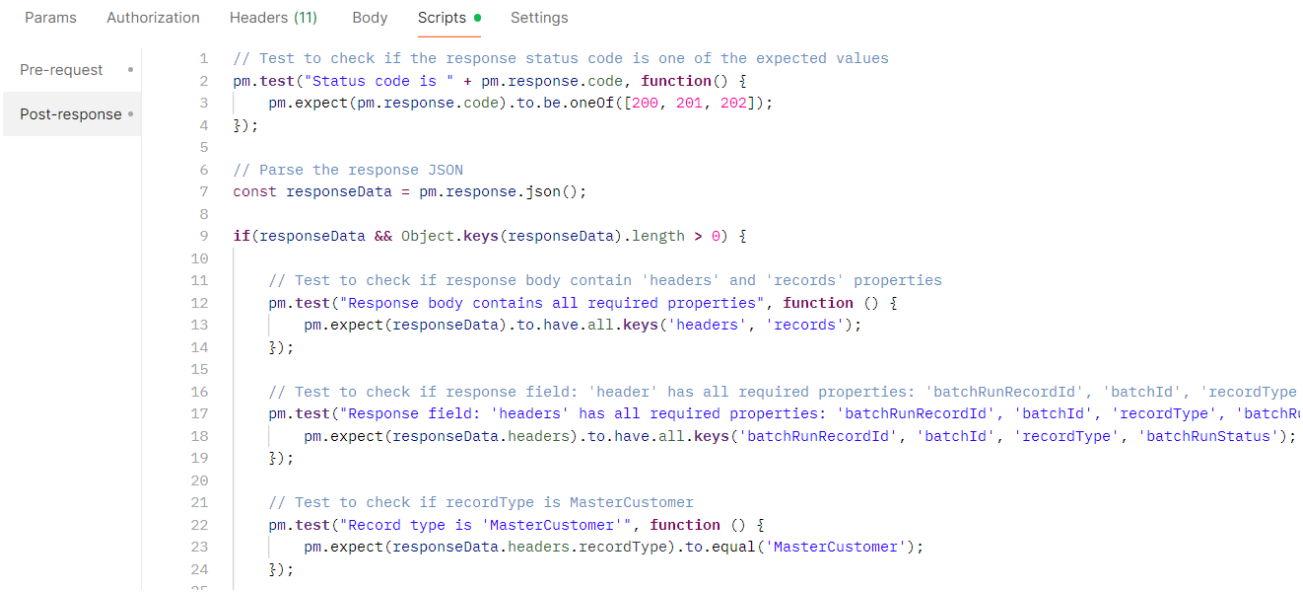
1. Go to your request → Click on the "Pre-request Script" tab.
2. Add your script.

1.3 Post-response Script

Also known as a Test Script, this JavaScript runs *after* a response is received. It's used to verify outcomes, assert conditions on status codes, headers, response time, and body content.

Steps:

1. Go to your request → Click on the "Post-response Script" tab.
2. Add your script.



2. Exporting Collection

Before using Newman, export your Postman collection:

- Go to Collections → Hover over your collection → Click "..." → "Export"
- Select Collection v2.1 (recommended) → Save as collection.json

Also export environment (if needed):

- Go to Environments → Select the environment → Click "..." → "Export"

3. Running Tests with Newman

3.1 Basic Run :

```
newman run collection.json
```

3.2 With Environment :

```
newman run collection.json -e environment.json
```

3.3 Generate HTML Report :

```
npm install -g newman-reporter-html
```

3.4 Run with HTML report :

```
newman run collection.json -e environment.json -r html
```

Newman Report

Collection	NetSuite SYS API
Description	- This is the NetSuite System API that has one endpoint "records" that works with the POST method only. - It is protected with Client ID enforcement, the following headers are supposed to be passed. - client_id: The unique identifier for the client application, issued by the authorization. - client_secret: The confidential key associated with the client_id that will be used to authenticate the application. - One mandatory header is being passed, specifying the NetSuite object we are dealing with. - object_type: Specifies object type. - LogOnSuccessEnableFlag is a non-mandatory header, for which there can be 2 values: - true: if the value is true, then the records will be upserted to the recordLog object in NetSuite. - false: if the value is false, then the records will be upserted into the recordLog object only when NetSuite upsertion errors.
Time	Tue Jun 24 2025 13:02:05 GMT+0530 (India Standard Time)
Exported with	Newman v6.2.1

	Total	Failed
Iterations	1	0
Requests	10	0
Prerequest Scripts	8	0
Test Scripts	10	0
Assertions	40	0

Total run duration	18.1s
Total data received	2.89KB (approx)
Average response time	1726ms

Total Failures **0**

Requests

customer

Upsert Records customer

Method	POST
URL	https://dev-sys-netsuite-app-k6owae.6euqcy.usa-e1.cloudhub.io/api/v1/franchise/customer
Mean time per request	2.2s
Mean size per request	272B
Total passed tests	6
Total failed tests	0
Status code	200

Tests

Name	Pass count	Fail count
Header includes all the required properties: client_id, client_secret, record_log_on_success_enable_flag	1	0
Record type is Customer	1	0
All records have recordType, batchRunStatus, recordId, customerId, parentCompany properties	1	0
Status code is 200	1	0
Upsert status is successful	1	0
All Customer records are upserted successfully	1	0