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Automation Testing

Collections



A Day in the Life of an Automation Testing Engineer

John is now familiar with functional testing of the company's systems. He is now assigned to create a Collection in Postman to group the similar API tests he had developed as part of the new application.

After completing this session, John will be able to create and run a Collection in Postman.



Learning Objectives

By the end of this lesson, you will be able to:

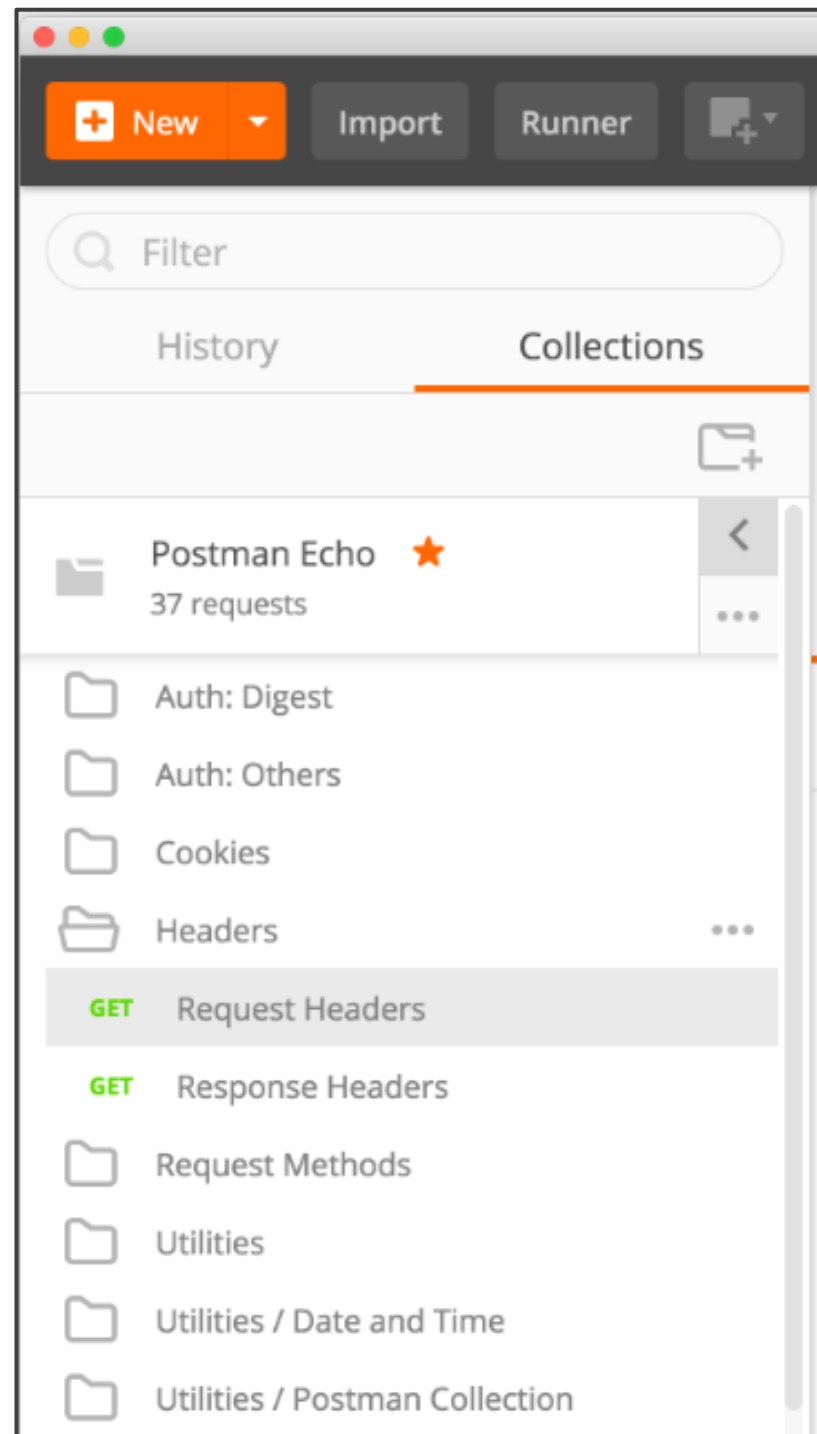
- Define a Collection
- List the steps to create a Collection in Postman
- Explain the steps to run a Collection in Postman
- State Newman in Postman



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What Is a Collection?

Collections



A Collection is a bunch of API requests that can be saved and organized. It allows users to:


- Create folders
- Insert similar requests into a folder
- Run multiple requests at a single click
- Run subsequent requests
- Create easy API Documentation




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Why a Collection Is Used?

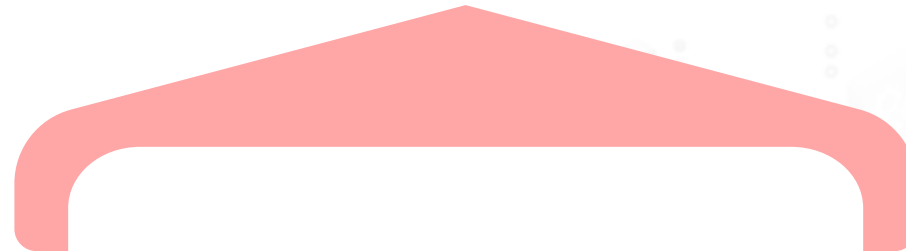
Why a Collection Is Used?



In Postman, a Collection allows users to save and organize a bunch of API requests into folders.



A Collection ensures that the client's demands are better organized and documented.



In a Collection, team members in the Postman workplace can easily access API requests as these are saved and organized correctly.

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How to Run a Collection?

Collection Runner

Users can run a Collection to simultaneously initiate several requests in Postman.

The Collection does not provide a response body for each request after execution.

The Collection Runner console generates a status for every request, pass or fail.

A Collection Runner must have at least two requests for the Collection.

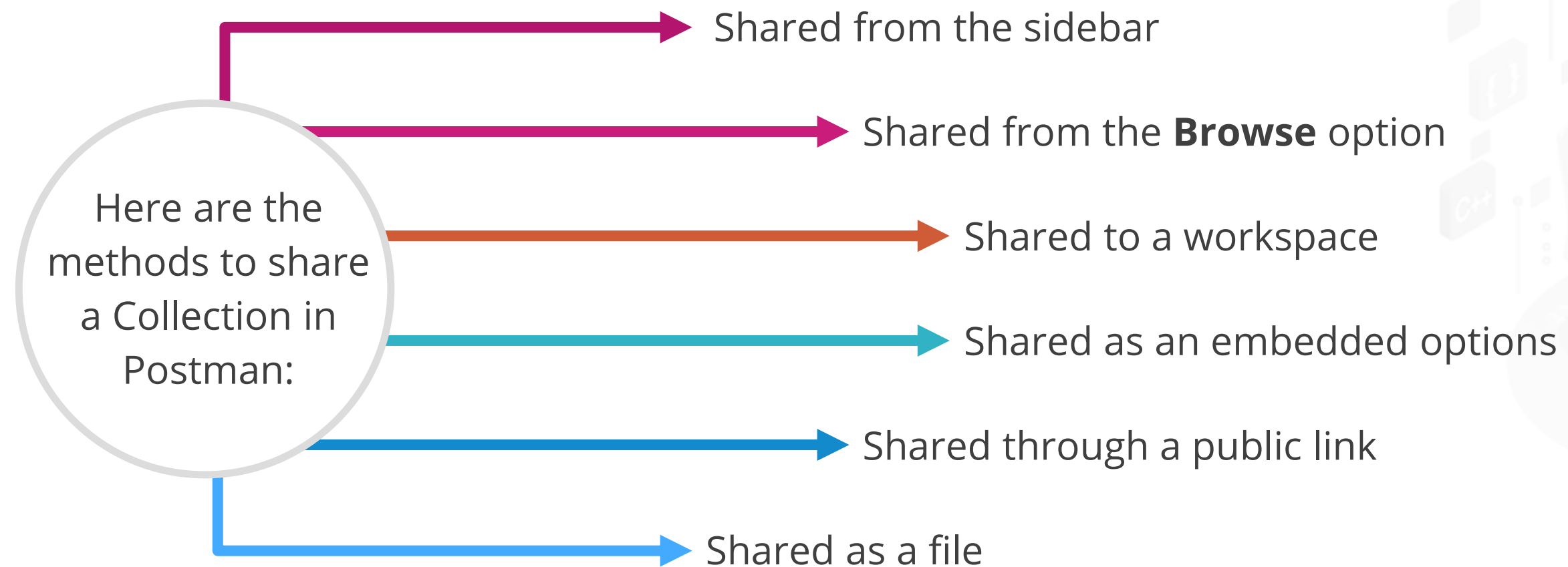
The Collection Runner also contains information on the response code, time, payload size, and checkpoints. Results are displayed in green for passes and red for failures.

How to Share a Collection?



Sharing a Collection

Users can send links to the Collections from the Postman app to those who are not on the workspace team. They can also send the Collections directly to the team. Users must be signed in to share a Collection on Postman.



How to Remove a Collection from Workspace?



Removing a Collection from Workspace

The **Remove from Workspace** option removes the Collection from users' current workspace.

If the workspace is personal, users can delete it by selecting the option. However, if a team shares the workspace, they will need the authorization to remove any Collections or requests from the workspace.

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What Is Newman?

Newman in Postman

```
Terminal
in ~/desktop/newman-run
→ newman run postman-echo.json
```

```
Terminal
↳ Leap year check
  GET https://postman-echo.com/time/leap?timestamp=2016-10-10 [200 OK, 224B, 93ms]
  ✓ response is ok
  ✓ response json should say timestamp is within leap year
↳ Auth: Digest
  ↳ DigestAuth Request
    GET https://postman-echo.com/digest-auth [401 Unauthorized, 350B, 94ms]
    ✓ response code is 401
    ✓ response has WWW-Authenticate header
```

	executed	failed
iterations	1	0
requests	35	0
test-scripts	35	0
prerequisite-scripts	0	0
assertions	86	0

```
total run duration: 6.8s
total data received: 23.43KB (approx)
average response time: 174ms [min: 92ms, max: 2.1s, s.d.: 339ms]

in ~/desktop/newman-run took 9s
→
```

In Postman, Newman is a command-line Collection Runner. It is used to:

- Execute and test a Postman Collection
- Connect a Collection with continuous integration servers and build automated systems
- Run Remote API
- Stop API running when test cases failed
- Specify request timeout

Features of Newman in Postman

Users can execute a Postman Collection directly from the command line using Newman.

Newman is a command-line Collection Runner for Postman on the company's official website. It makes Postman and Newman a unique combination.

Users can use Newman to run Collections in the same manner that a Postman Collection Runner does.

Continuous integration by Newman in Postman makes this combination of tests and code successful and enables users to merge the various codes and run the tests continually.

Advantages of Using Newman

It offers test suites that are simple to make.

It allows keeping data needed to conduct tests in various Environments.

It utilizes the Newman command-line tool to integrate with build systems, such as Jenkins.

It can quickly transfer Environments and tests to code repositories.

It can conduct Instantaneous testing.

Key Takeaways

- ➊ A Collection in Postman is a group of API requests.
- ➋ The Collection Runner is used to perform API requests of a Collection in a specific order.
- ➌ Newman is a command-line Collection Runner for Postman.
- ➍ Newman can run a Collection through the command line, and the results can be exported to a JSON file.

