

Authorization Types in Postman

Authorization is a process of verifying the identity of a user or system to access APIs securely. Postman supports **various authorization types** to interact with APIs.

1. Basic Auth

- **How it works:** Uses a username and password **encoded** into the request header.
- **Use Case:** Simple APIs with basic authentication.

Example 1:

Request:

GET: <https://postman-echo.com/basic-auth>

Auth Type: Basic Auth

- Username: postman
- Password: password

Example 2:

Request:

GET: http://the-internet.herokuapp.com/basic_auth

Auth Type: Basic Auth

- Username: admin
- Password: admin

2. Digest Auth

- **How it works:** Similar to Basic Auth, but more secure as it uses encryption.
- **Use Case:** APIs requiring added security over Basic Auth.

Example:

Request:

GET: <https://postman-echo.com/basic-auth>

Auth Type: Digest Auth

- Username: postman
- Password: password

3. API Key

- **How it works:** Uses a unique key provided by the API provider to authenticate.
- **Use Case:** Public APIs like weather or stock market services.

Example: OpenWeatherMap API

Request:

GET: <https://api.openweathermap.org/data/2.5/weather?q=Delhi&appid={API key}>

Auth Type: API Key

- **Key:** appid
- **Value:** fe9c5cddb7e01d747b4611c3fc9eaf2c
- **Add to:** Query Params

4. Bearer Token

- **How it works:** Uses a token as a secure identifier for a user or app.
- **Use Case:** APIs requiring user authorization or personal data access.

Example: GitHub API

Request:

GET: <https://api.github.com/user/repos>

Auth Type: Bearer Token

- **Token:** ghp_Eb[REDACTED]5XTvNHri34UVjKD

Note: You need to generate this token from your GitHub account.

5. OAuth 2.0

- **How it works:** A complex and secure method to authorize users by using access tokens, often involving a login flow.
- **Use Case:** Used in platforms like Google, Facebook, or Imgur for user authentication.

Example: Imgur API

Request:

GET: <https://api.imgur.com/3/account/me/images>

Auth Type: OAuth 2.0

- **Note:** Tokens are generated through the OAuth process.

Summary

Each authorization type serves a different purpose:

- **Basic Auth:** Username and password (simple and quick).
- **Digest Auth:** More secure than Basic Auth.
- **API Key:** A unique key to authenticate (public APIs).
- **Bearer Token:** A token-based secure method (user-specific access).
- **OAuth 2.0:** The most secure and widely used for user authentication.