

# TECHNOLOGY



## Automation Testing

## Handle OAuth Authorization in REST API Using REST Assured





# A Day in the Life of an Automation Test Engineer

Thomas has successfully parsed the XML and JSON response using REST Assured. Now, however, he is concerned about the authentication of data from API. So, he must gain knowledge about some authentication tools.

To achieve the above goal, he must learn OAuth and its various versions, and the process to handle authorization through them.



# Learning Objectives

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

- 🕒 Understand the basics of authorization
- 🕒 Analyze the types of authentication
- 🕒 Explain OAuth
- 🕒 Handle authorization using OAuth

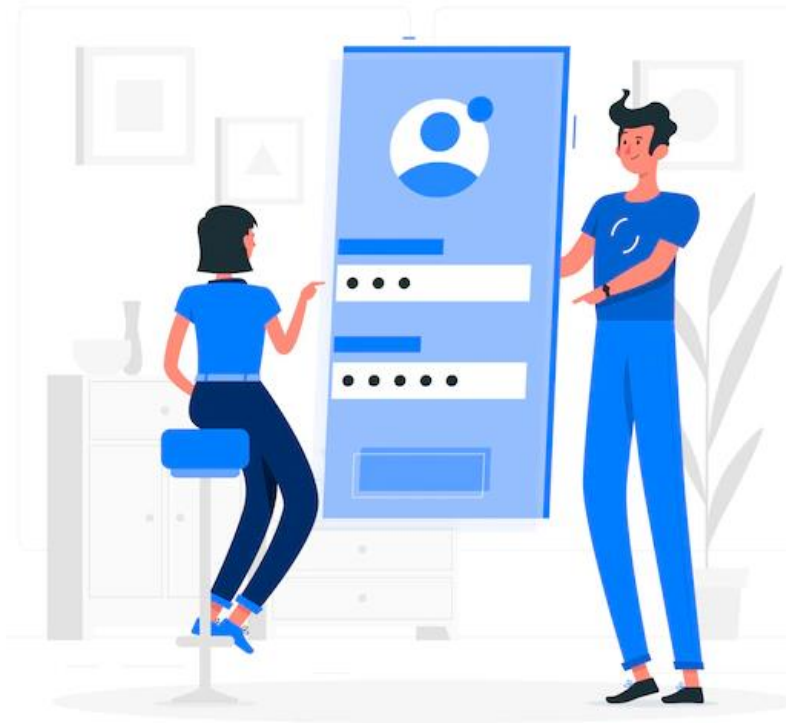


## What Is Authentication?

# What Is Authentication?

Authentication refers to the process of validating a user's authority to access any resource over an API.

Example:



Users submit credentials to get access.



Users get access after validation.

# Authentication in REST Assured

Authentication in REST Assured can be performed using:



Basic Authentication

Digest Authentication

Form Authentication

OAuth Authentication



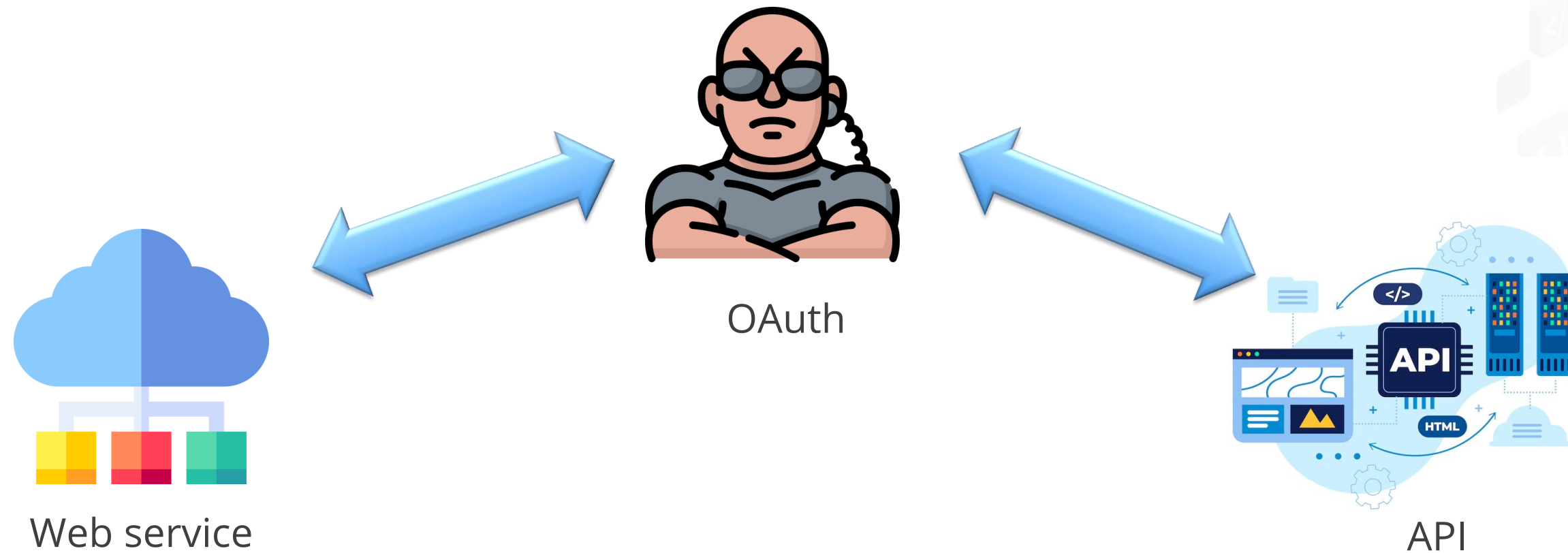


## About OAuth



# About OAuth

OAuth is an authorization framework that authorizes consent to an application interacting with the server on behalf of the user.



# Versions of OAuth

There are two versions of OAuth:

OAuth 1.0

OAuth 2.0

- It was started by Twitter in 2006.
- It has complex client security handling.
- It has limited scope and is not extensible.

# Versions of OAuth

There are two versions of OAuth:

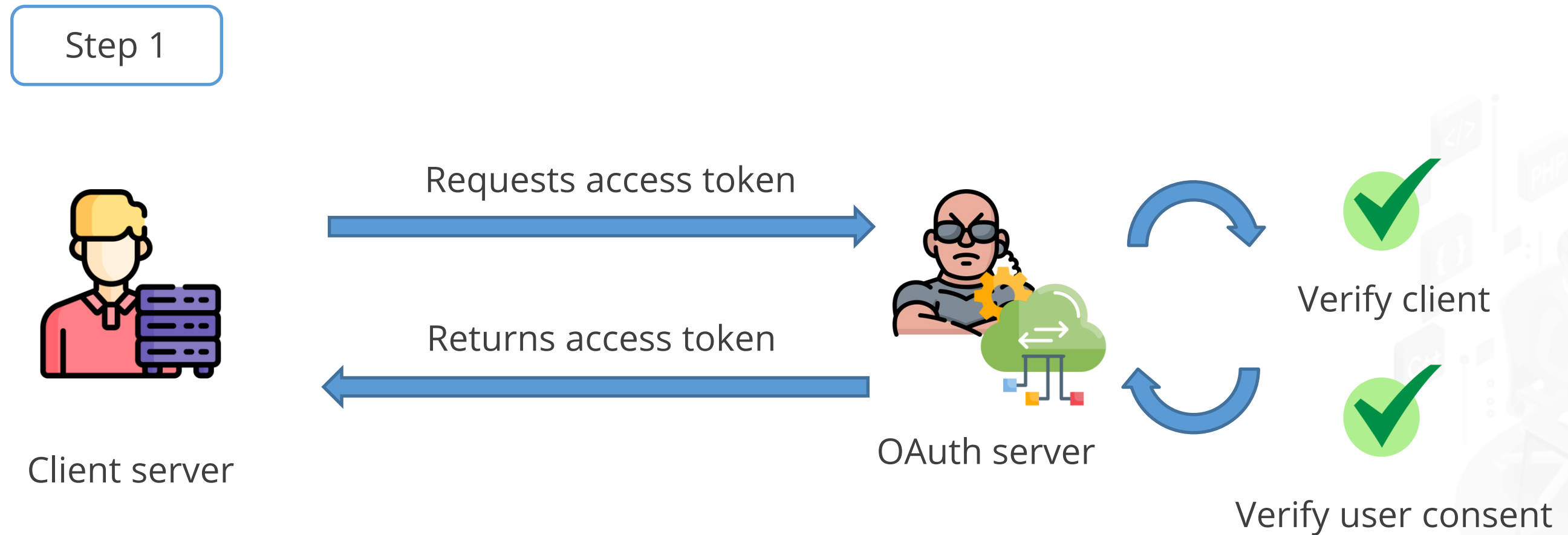
OAuth 1.0

OAuth 2.0

- Its security is enforced by TSL or SSL (HTTP).
- It helps to separate roles for the client and servers.
- It provides refresh tokens.

# Handle OAuth Authorization in REST API Using REST Assured

The steps depicting the flow of OAuth authorization in REST Assured are:

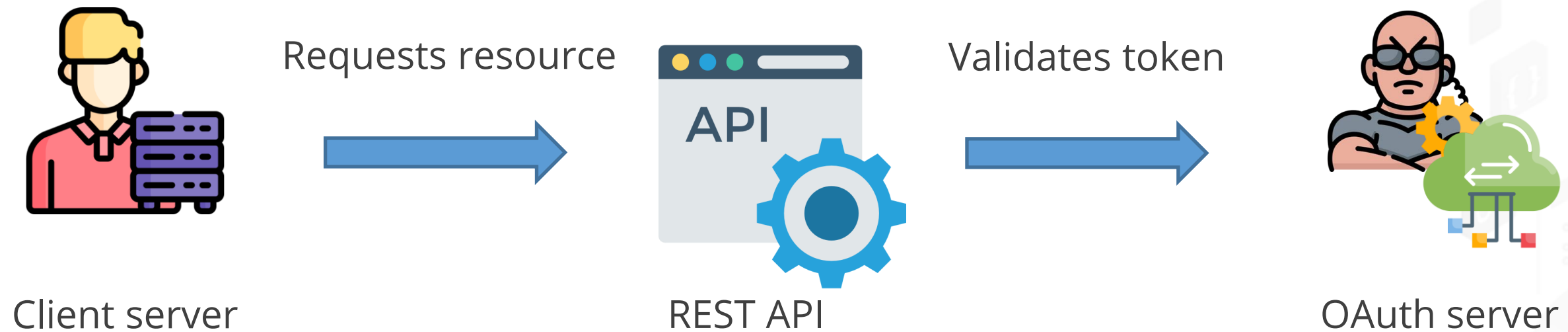




# Handle OAuth Authorization in REST API Using REST Assured

The steps depicting the flow of OAuth authorization in REST Assured are:

Step 2



# Handle OAuth Authorization in REST API Using REST Assured

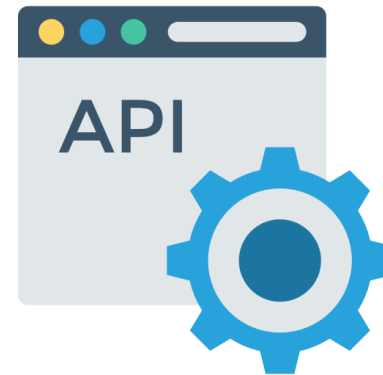
The steps depicting the flow of OAuth authorization in REST Assured are:

Step 3



Client server

Provides resource



REST API

Validates token



OAuth server

# Generating Token in OAuth 2.0

To generate tokens automatically, use the following Java code:

```
given().auth().oauth2("Access Token")  
.get("The end point URL")
```



## Key Takeaways

- An authentication process validates a user's credentials.
- The authorization is about allowing a user to get access to information.
- OAuth 2.0 is mostly used in industries.
- OAuth allows the generation of fresh tokens automatically.

