

# WHAT IS API





Application

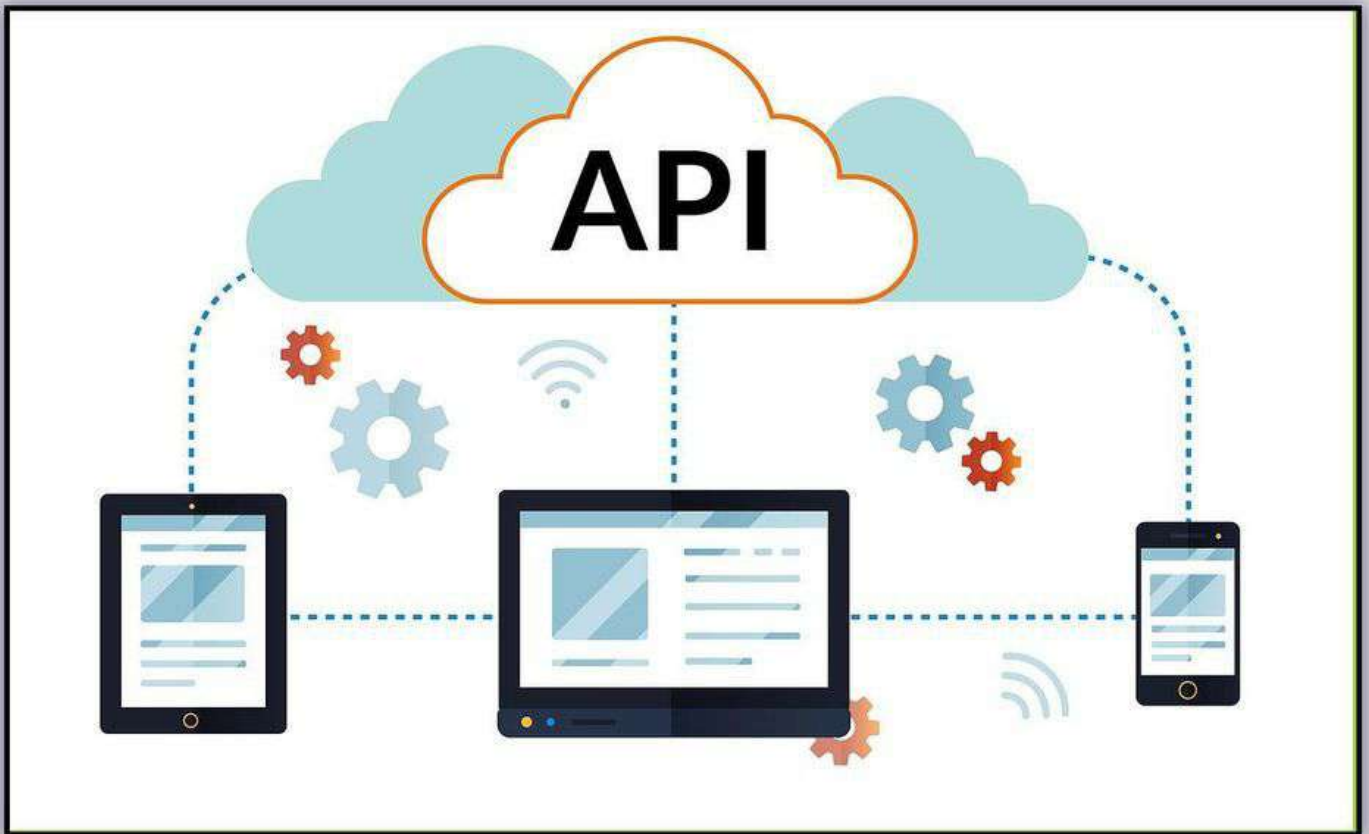


Programming



Interface

Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention. API is a collection of software functions and procedures. In simple terms, API means a software code that can be accessed or executed. API is defined as a code that helps two different software's to communicate and exchange data with each other.



# Types of APIs

## Open APIs

Also known as Public APIs. These APIs are publicly available and there are no restrictions to access them.

## Partner APIs

These APIs are not publicly available, so you need specific rights or licenses to access them.

## Internal APIs

Internal or private. These APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.

## Composite APIs

This type of API combines different data and service APIs.

# Web Services APIs

## SOAP

It defines messages in XML format used by web applications to communicate with each other.

## REST

It makes use of HTTP to GET, POST, PUT, or DELETE data. It is basically used to take advantage of the existing data.

## JSON-RPC

It uses JSON for data transfer and is a light-weight remote procedural call defining few data structure types.

## XML-RPC

It is based on XML and uses HTTP for data transfer. This API is widely used to exchange information between two or more networks.

# **Examples of API**

- 1. Razorpay API**
- 2. Google Maps API**
- 3. Spotify API**
- 4. Twitter API**
- 5. Weather API**
- 6. PayPal API**
- 7. PayTm API**
- 8. HubSpot API**
- 9. Youtube API**
- 10. Amazon's API**
- 11. Travel Booking API**
- 12. Stock Chart API**

# API Testing Tools

## Postman

Postman is a plugin in Google Chrome, and it can be used for testing API services. It is a powerful HTTP client to check web services. For manual or exploratory testing, Postman is a good choice for testing API.

## Ping API

Ping API is API testing tool which allows us to write test script in JavaScript and CoffeeScript to test your APIs. It will enable inspecting the HTTP API call with a complete request and response data.

## vREST

vREST API tool provides an online solution for automated testing, mocking, automatic recording, and specification of REST/HTTP APIs/RESTful APIs.

# Features of API

It offers a valuable service (data, function, audience).

It helps you to plan a business model.

Simple, flexible, quickly adopted.

Managed and measured.

Offers great developer support.