

What Is API?

API is a set of programming instructions for accessing a Web-based software application, which defines interactions between multiple software intermediaries. The software companies releasing their APIs to the public so that other software developers can design products that are powered by its service. Application programming interface is a software to software interface, it is not a user interface.

What is Web Service?

It is a client-server application. The method of communication between two devices over the network, which is a collection of standards for exchanging information between two devices or application. Web service is a software module designed to perform a certain set of tasks. Web service can be searched over the network or invoked. When invoked, the web service would be able to provide the functionality for client, which has been invoked.

Differences between Web Service and API

API is an interface which allows to build on the data & functionality of another app, while a Web Service is a network based resource that perform a specific task. All Web Services are API, but all APIs are not web services. Both are very useful and used nowadays.

Web services require a network. While APIs can be on or offline, web services must use a network.

API

- All APIs are not web services.
- Supports any style of communication.
- Provides support for the HTTP/s protocol.
- It is open source and it can be used by any client that understands JSON or XML.

Web service

- All web services are APIs.
- Uses REST, SOAP & XML-RPC for communication
- Provides supports only for the HTTP protocol.
- It is not open source but can be used by any client that understands XML.