

An overview of Web Services

In today's world, the need for agile, reusable and self-contained applications is at its peak. A web service can be described as a reusable software component that can be published and used by another software over the internet. The goal here is to provide an easy mechanism for applications to locate a service that provides the desired function and then implement it to achieve its goal.

Benefits provided with the use of Web Services

Many advantages are associated with the use of web services. In essence, the main advantage web services have over regular web applications lies in its interoperable nature, that is web services can communicate with different applications to provide a higher business level functionality despite the various underlying technologies of each application. Web services are hardware, programming language, and operating system independent. This independence is due to the use of the standardized XML technologies. Such technologies include SOAP, WSDL, and UDDI. Furthermore, web services offer additional advantages including reduced costs, application integration, and data integration.

Technologies used in Web Services

Several technologies support the process involved in the use of web services. These technologies are summarized below:

1. Simple Object Access Protocol (SOAP)

is a messaging protocol that enables data communication between web services.

2. Universal Description Discovery Interface (UDDI)

is a standard used by the service provider to describe a web service and is used by the consumer to locate a web service

