**Several features distinguish web services from other distributed software systems. Here are three:**

***Open infrastructure:*** Web services are deployed using industry-standard, vendor-independent protocols and languages such as HTTP, XML, and JSON, all of which are present everywhere and well understood. Web Services can piggyback on networking, data formatting, security, and other infrastructures already in place, which lowers entry costs and promotes interoperability among services. Organizations that publish websites with production-grade web servers such as Apache2, IIS, and Nginx can publish web services with these very web servers. Firewalls and other security mechanisms that defend websites thereby defend web services as well.

**Platform and language transparency:** *Web services and their clients can able to exchange and use information* even if written in different programming languages. Languages such as C, C#, Go, Java, JavaScript, Perl, Python, Ruby, and others provide libraries, utilities, and even frameworks in support of web services. Web services can be published and consumed on various hardware platforms and under different operating systems. Web services are an excellent way to integrate diverse software systems while allowing the programmer to work in the programmer’s language of choice. The web service approach to software development is not to rewrite but, rather, to integrate.

**Modular Design:** Web Services are meant to be modular in design so that new services can be composed out of existing one. Imagine, for example, an inventory-tracking service integrated with an online ordering service to compose a service that automatically orders the appropriate product in response to inventory levels. Web services are the small software parts out of which arbitrarily large systems cab be built. A guiding principle in web service design is to begin with very simple service operations, essentially uncomplicated functions, and then group these operation into services, which in turn can be orchestrated to work with other services, and so on indefinitely.