

Most enterprises have made extensive investments in system resources over the course of many years. Such enterprises have an enormous amount of data stored in legacy enterprise information systems, so it's not practical to discard existing systems. It's more cost-effective to evolve and enhance these systems. This is accomplished with Service Oriented Architecture (SOA).

SOA is emerging as the premier integration and architecture framework in today's complex and heterogeneous computing environment. Previous attempts didn't enable open interoperable solutions, but relied on proprietary APIs and required a high degree of coordination between groups. SOA can help organizations streamline processes so that they can do business more efficiently and adapt to changing needs and competition, enabling the software as a service concept. SOA and web services are two different things, but web services are the preferred standards-based way to realize SOA.

SOA is an architectural style for building software applications that use services available in a network such as the web. It promotes loose coupling between software components so that they can be reused. Applications in SOA are built based on services.

SOA allows for the reuse of existing assets where new services can be created from an existing IT infrastructure of systems. In other words, it enables businesses to leverage existing investments by allowing them to reuse existing applications and promises interoperability between heterogeneous applications and technologies. SOA provides a level of flexibility that wasn't possible before.

Web services are software systems designed to support interoperable machine-to-machine interaction over a network. This interoperability is gained through a set of XML-based open standards, such as WSDL, SOAP, and UDDI. These standards provide a common approach for defining, publishing, and using web services.