

## SERVICE-ORIENTED ARCHITECTURE

### SOA

SOA is a style of IT architecture that delivers agility and Boundaryless Information Flow™. It is deployed on an increasing scale in enterprises today. The SOA Work Group exists to develop and foster common understanding of SOA in order to facilitate alignment between the business and information technology communities. The SOA Source Book is a collection of source material produced by the SOA Work Group for use by Enterprise Architects working with SOA.

### SOA Work Group

The Open Group formed its SOA Work Group in October 2005 to address the rapidly-growing interest in SOA. Since then it has produced a number of standards, guides, and white papers. It maintains an active work program, reflecting the fact that interest in and support for SOA continues to the present. It published its current conclusions in the SOA Source Book.

It is a Work Group of The Open Group. Every silver, gold, and platinum member can participate in its activities. Find it on the web at [www.opengroup.org/getinvolved/workgroups/soa](http://www.opengroup.org/getinvolved/workgroups/soa).

### Mission

The SOA Work Group exists to develop and foster common understanding of SOA in order to facilitate alignment between the business and information technology communities. It does this by conducting a work program to produce definitions, analyses, recommendations, reference models, and standards to assist business and information technology professionals within and outside of The Open Group to understand and adopt SOA.

### The SOA Source Book

The Open Group SOA Source Book is a collection of source material for use by Enterprise Architects working with SOA. It consists of material that has been considered and in part developed by the SOA Work Group. It includes the SOA standards and other SOA publications approved by The Open Group, plus interim material that does not necessarily represent the final output of the projects concerned.



### What is SOA?

Service-Oriented Architecture (SOA) is an architectural style that supports service-orientation.

Service-orientation is a way of thinking in terms of services and service-based development and the outcomes that services bring.

A service is a logical representation of a repeatable business activity such as:

- Check customer credit
- Provide weather data
- Consolidate drilling reports

It has a specified outcome, is self-contained, and may be composed of other services. It is a black box to its consumers.

An architectural style is a combination of distinctive features in which Enterprise Architecture is done, or expressed. The SOA architectural style has distinctive features:

- It is based on the design of services that mirror real-world business activity.
- Service representation uses business descriptions.
- It has unique requirements on infrastructure.
- Implementations are environment and context-specific.
- It requires strong governance of service representation and implementation.
- It requires a "litmus test" that determines a "good service".

## The SOA Source Book (continued)

The Source Book reflects input from a large number of people from a wide range of Open Group member companies, including product vendors, consultancies, and users of SOA. In some cases, these people have brought concepts developed, not just by themselves, but by groups of people within their organizations. The input has been refined and further developed through discussion within the Work Group. The Source Book is available at [www.opengroup.org/soa/source-book/intro](http://www.opengroup.org/soa/source-book/intro).

### Completed Projects

The SOA Work Group has completed:

- A common definition and reference model for SOA Governance, including re-usable processes and structures for SOA Governance
- A Guide to using TOGAF® to Define and Govern SOAs, which describes style-specific adjustments to the TOGAF standard to enable a trained TOGAF practitioner to use the TOGAF framework to develop an SOA
- A vendor-independent SOA Reference Architecture that describes the characteristics of a typical SOA environment and is appropriate for use with the TOGAF framework
- A formal ontology for SOA that defines the concepts, terminology, and semantics of SOA in both business and technical terms, to increase understanding, and be a potential basis for model-driven implementation
- A reference framework for Service-Oriented Cloud Computing Infrastructure (SOCCI)
- Guidance on how to evolve legacy systems to SOA
- A White Paper on Microservices Architecture

It has also supported The Open Group Governing Board project that has delivered:

- The Open Group SOA Integration Maturity Model (OSIMM), which provides consultants and IT practitioners with a means to assess an organization's SOA maturity level

The SOA Governance Framework and the OSIMM have been adopted by ISO as International Standards through the Publicly Available Specifications (PAS) process. The SOA Reference Architecture and the formal ontology were submitted to ISO/IEC JTC1 as input to its work on an International Standard Reference Architecture for SOA, which resulted in the development and publication of ISO/IEC 18384: 2016.

### Current Projects

The SOA Work Group is currently working on:

- A Guide to SOA for Business Technology (SOA4BT), which will provide guidelines and taxonomy based on capabilities, service categorization, and metrics, to align SOA and Business with a mechanism to assess, improve, and express SOA in business terms
- A Reference Architecture for Microservices
- A White Paper on Microservices and the Internet of Things
- A certification program for SOA professionals

### More information

For more information, please visit our website:  
[www.opengroup.org/getinvolved/workgroups/soa](http://www.opengroup.org/getinvolved/workgroups/soa).

### About The Open Group

The Open Group is a vendor-neutral and technology-neutral consortium, whose vision of Boundaryless Information Flow™ will enable access to integrated information within and between enterprises based on open standards and global interoperability. The Open Group works with customers, suppliers, consortia, and other standards bodies. Its role is to capture, understand, and address current and emerging requirements, establish policies, and share best practices; to facilitate interoperability, develop consensus, and evolve and integrate specifications and open source technologies; to offer a comprehensive set of services to enhance the operational efficiency of consortia; and to operate the industry's premier certification service.

Further information on The Open Group can be found at  
[www.opengroup.org](http://www.opengroup.org).

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