
**Information technology — The Open
Group Service Integration Maturity Model
(OSIMM)**

*Technologies de l'information — Modèle de maturité d'intégration du
service de groupe ouvert (OSIMM)*

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Open Group Standard

**The Open Group Service Integration Maturity Model (OSIMM)
Version 2**

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Preface

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This Document

This document is the Technical Standard for The Open Group Service Integration Maturity Model (OSIMM), Version 2. It has been developed and approved by The Open Group.

The Open Group SOA Integration Maturity Model (OSIMM) provides consultants and IT practitioners with a means to assess an organization's Service Oriented Architecture (SOA) maturity level. It defines a process to create a roadmap for incremental adoption which maximizes business benefits at each stage along the way. The model consists of seven levels of maturity and seven dimensions of consideration that represent significant views of business and IT capabilities where the application of SOA principles is essential for the deployment of services. The OSIMM acts as a quantitative model to aid in assessment of current state and desired future state of SOA maturity.

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Referenced Documents (Non-Normative)

The following documents are referenced non-normatively in this Technical Standard:

- [BPEL] Business Process Execution Language Standard; refer to:
<http://docs.oasis-open.org/wsbpel/2.0/OS/wsbpel-v2.0-OS.html>
- [SOA GF] The Open Group SOA Governance Framework, Technical Standard, August 2009 (C093); refer to: www.opengroup.org/bookstore/catalog/c093.htm
- [SOA ONT] The Open Group SOA Ontology, Technical Standard, October 2010 (C104); refer to: www.opengroup.org/bookstore/catalog/c104.htm
- [SOA RM] OASIS Reference Model for SOA (SOA RM), Version 1.0, OASIS Standard, 12 October 2006; refer to: docs.oasis-open.org/soa-rm/v1.0/soa-rm.pdf
- [SOAWG] SOA Definition, The Open Group SOA Work Group; refer to:
www.opengroup.org/projects/soa
- [SOA WP] Navigating the SOA Open Standards Landscape Around Architecture, Joint White Paper from OASIS, OMG, and The Open Group, July 2009 (W096); refer to:
www.opengroup.org/bookstore/catalog/w096.htm

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1 Introduction

1.1 Objective

This document is The Open Group Service Integration Maturity Model (OSIMM). It specifies:

- A model against which the degree of service integration maturity of an organization can be assessed
- A process for assessing the current and desired degree of service integration maturity of an organization, using the model

1.2 Overview

Service Oriented Architecture (SOA) is an *architectural style* that supports *service orientation*. A service is a business task with an externalized service description that often represents a contract between a provider and a consumer. As organizations adopt SOA and the use of services as the fundamental structuring element of their architecture, they increasingly encounter the need to assess where they are in their migration path and how best to achieve the expected benefit derived from integrating and investing in greater levels of SOA maturity.

OSIMM helps an organization to create a roadmap for its incremental transformation towards more mature levels of service integration, in order to achieve increasing business benefits associated with higher levels of maturity. OSIMM is used to determine which organizational characteristics are desirable in order to attain a new level of maturity. This will also help determine whether problems occurring at the current level of service integration maturity can be solved by evolving to a higher level.

OSIMM is offered to the industry as a standardized model to help organizations guide their SOA transformation journey. A standard maturity model enables enterprises to benchmark their SOA levels and develop roadmaps for transformation to assist their planning. It can also be used by vendors to position their services and software against these benchmarks. OSIMM may also serve as a framework for the transformation process that can be customized to suit the specific needs of organizations and assessments. This process consists of the following steps:

- Prepare the OSIMM assessment framework
- Determine the initial level of maturity
- Determine the target level of maturity
- Identify the transformation path necessary for the organization to achieve the desired level of maturity