

---

---

## **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)*



**COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 16680 was prepared by The Open Group and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

*Open Group Standard*

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



## ISO/IEC 16680:2012(E)

Copyright © 2009-11, The Open Group. All rights reserved. This printing is by the International Organization for Standardization with special permission of The Open Group.

The Open Group hereby authorizes you to copy this document for non-commercial use within your organization only. In consideration of this authorization, you agree that any copy of this document which you make shall retain all copyright and other proprietary notices contained herein.

This document may contain other proprietary notices and copyright information.

Nothing contained herein shall be construed as conferring by implication, estoppel, or otherwise any license or right under any patent or trademark of The Open Group or any third party. Except as expressly provided above, nothing contained herein shall be construed as conferring any license or right under any copyright of The Open Group.

Note that any product, process, or technology in this document may be the subject of other intellectual property rights reserved by The Open Group, and may not be licensed hereunder.

This document is provided "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Any publication of The Open Group may include technical inaccuracies or typographical errors. Changes may be periodically made to these publications; these changes will be incorporated in new editions of these publications. The Open Group may make improvements and/or changes in the products and/or the programs described in these publications at any time without notice.

Should any viewer of this document respond with information including feedback data, such as questions, comments, suggestions, or the like regarding the content of this document, such information shall be deemed to be non-confidential and The Open Group shall have no obligation of any kind with respect to such information and shall be free to reproduce, use, disclose and distribute the information to others without limitation. Further, The Open Group shall be free to use any ideas, concepts, know-how, or techniques contained in such information for any purpose whatsoever including but not limited to developing, manufacturing, and marketing products incorporating such information.

Technical Standard

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

ISBN: TBA

Document Number: TBA

Published by The Open Group, <month year>.

Comments relating to the material contained in this document may be submitted to:

The Open Group, Apex Plaza, Forbury Road, Reading, Berkshire, RG1 1AX, United Kingdom

or by electronic mail to: [ogspeccs@opengroup.org](mailto:ogspeccs@opengroup.org)

## Contents

1	Introduction .....	1
1.1	Objective .....	1
1.2	Overview .....	1
1.3	Conformance .....	2
1.4	Terminology .....	3
1.5	Future Directions .....	7
2	The Model .....	8
2.1	Overview .....	8
2.2	Maturity Levels .....	10
2.2.1	Level 1: Silo .....	10
2.2.2	Level 2: Integrated .....	10
2.2.3	Level 3: Componentized .....	10
2.2.4	Level 4: Service .....	10
2.2.5	Level 5: Composite Services .....	11
2.2.6	Level 6: Virtualized Services .....	11
2.2.7	Level 7: Dynamically Re-Configurable Services .....	11
2.3	Dimensions .....	12
2.3.1	Business .....	12
2.3.2	Organization & Governance .....	12
2.3.3	Method .....	12
2.3.4	Application .....	12
2.3.5	Architecture .....	12
2.3.6	Information .....	13
2.3.7	Infrastructure & Management .....	13
2.4	Service Foundation Levels .....	13
2.5	Assessment Questions and Maturity Indicators by Dimension .....	13
2.5.1	Service Maturity Assessment Questions .....	13
2.5.2	Maturity Indicators-to-Assessment Question Mapping .....	14
2.6	Extending the Base OSIMM Model .....	14
3	Business Dimension: Base Model .....	16
3.1	Business Dimension: Base Model Maturity Indicator .....	16
3.2	Business Dimension: Assessment Questions .....	16
3.3	Business Dimension: Maturity Indicator-to-Attribute Mapping .....	17
4	Organization & Governance Dimension: Base Model .....	20
4.1	Organization & Governance Dimension: Base Model Maturity Indicator .....	20
4.2	Organization & Governance Dimension: Assessment Questions .....	21
4.3	Organization & Governance Dimension: Maturity Indicator-to-Attribute Mapping .....	21
5	Method Dimension: Base Model .....	25

5.1	Method Dimension: Base Model Maturity Indicator.....	25
5.2	Method Dimension: Assessment Questions.....	26
5.3	Method Dimension: Maturity Indicator-to-Attribute Mapping .....	26
6	Application Dimension: Base Model.....	30
6.1	Application Dimension: Base Model Maturity Indicator .....	30
6.2	Application Dimension: Assessment Questions .....	31
6.3	Application Dimension: Maturity Indicator-to-Attribute Mapping .....	31
7	Architecture Dimension: Base Model .....	36
7.1	Architecture Dimension: Base Model Maturity Indicator .....	36
7.2	Architecture Dimension: Assessment Questions .....	37
7.3	Architecture Dimension: Maturity Indicator-to-Attribute Mapping .....	37
8	Information Dimension: Base Model .....	40
8.1	Information Dimension: Base Model Maturity Indicator .....	40
8.2	Information Dimension: Assessment Questions .....	41
8.3	Information Dimension: Maturity Indicator-to-Attribute Mapping .....	42
9	Infrastructure & Management Dimension: Base Model.....	45
9.1	Infrastructure & Management Dimension: Base Model Maturity Indicator .....	45
9.2	Infrastructure & Management Dimension: Assessment Questions.....	46
9.3	Infrastructure & Management Dimension: Maturity Indicator-to- Attribute Mapping.....	46
10	The OSIMM Assessment Method .....	50
10.1	Overview.....	50
10.2	OSIMM Assessment Steps .....	51
10.2.1	Identify the Pain-Points, Scope, and Business Goals .....	51
10.2.2	Extend the OSIMM Model.....	52
10.2.3	Assess Current State.....	52
10.2.4	Determine Future State.....	52
10.2.5	Identify the Gaps and Determine the Roadmap.....	52
A	Example Assessment.....	54
A.1	Business Objective.....	54
A.2	Analysis .....	54
A.3	Recommendations.....	55
B	Benefits of Moving to Higher Maturity Levels .....	59
B.1	From Silo to Integrated .....	59
B.2	From Integrated to Componentized .....	59
B.3	From Componentized to Services.....	59
B.4	From Services to Composite Services .....	60
B.5	From Composite Services to Virtualized Services .....	60

B.6	From Virtualized Services to Dynamically Re-Configurable Services .....	60
C	Relationship to Other SOA Standards .....	61
D	Relationship to Other International Standards .....	64
D.1	SC38 .....	64
D.2	SC7 .....	64



## Preface

### 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, including UNIX® certification.

Further information on The Open Group is available at [www.opengroup.org](http://www.opengroup.org).

The Open Group has over 15 years' experience in developing and operating certification programs and has extensive experience developing and facilitating industry adoption of test suites used to validate conformance to an open standard or specification.

More information is available at [www.opengroup.org/certification](http://www.opengroup.org/certification).

The Open Group publishes a wide range of technical documentation, the main part of which is focused on development of Technical and Product Standards and Guides, but which also includes white papers, technical studies, branding and testing documentation, and business titles. Full details and a catalog are available at [www.opengroup.org/bookstore](http://www.opengroup.org/bookstore).

As with all *live* documents, Technical Standards and Specifications require revision to align with new developments and associated international standards. To distinguish between revised specifications which are fully backwards-compatible and those which are not:

- A new *Version* indicates there is no change to the definitive information contained in the previous publication of that title, but additions/extensions are included. As such, it *replaces* the previous publication.
- A new *Issue* indicates there is substantive change to the definitive information contained in the previous publication of that title, and there may also be additions/extensions. As such, both previous and new documents are maintained as current publications.

Readers should note that updates – in the form of Corrigenda – may apply to any publication. This information is published at [www.opengroup.org/corrigenda](http://www.opengroup.org/corrigenda).

## **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.

## Trademarks

Boundaryless Information Flow™ is a trademark and ArchiMate®, Jericho Forum®, Making Standards Work®, Motif®, OSF/1®, The Open Group®, TOGAF®, UNIX®, and the ``X" device are registered trademarks of The Open Group in the United States and other countries.

The Open Group acknowledges that there may be other brand, company, and product names used in this document that may be covered by trademark protection and advises the reader to verify them independently.

## Acknowledgements

The Open Group gratefully acknowledges the contribution of the following people in the development of this document:

- Ali Arsanjani, IBM (Original SIMM Mapping)
- Tony Carrato, IBM
- Jorge Diaz, IBM
- Jack Fujieda, Regis Inc.
- Mats Gejnevall, Capgemini
- Henry Hendrikx, Capgemini
- Alex Heublien, HP
- Kerrie Holley, IBM (Original SIMM Mapping)
- Dave Ings, IBM
- Heather Kreger, IBM (Co-Author)
- Chris Moyer, EDS
- Ranu Pandit, Deloitte
- Vishal Prabhu, Deloitte
- Madhu Reddiboina, Deloitte
- Chuck Reynolds, Deloitte
- Andras Szakal, IBM (Work Group Chair, Model Extensions, Author)
- Srinivasan Vembakkam, IBM
- Mohan Venkataraman, Deloitte
- Steve Wolf, Marriott
- Members of The Open Group SOA Work Group

## 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](http://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](http://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](http://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](http://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](http://www.opengroup.org/bookstore/catalog/w096.htm)

# 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