

INTERNATIONAL
STANDARD

ISO/IEC
19502

First edition
2005-11-01

Information technology — Meta Object Facility (MOF)

Technologies de l'information — Facilité d'objet «méta» (MOF)

ISO/IEC 19502:2005

Reference number
ISO/IEC 19502:2005(E)



Not for Resale

© ISO/IEC 2005

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

ISO Central Secretariat

© ISO/IEC 2005

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
Web www.iso.org

Published in Switzerland

Contents

Foreword	viii
Introduction	ix
1 Scope	1
2 Normative references	1
2.1 Identical Recommendations International Standards	1
2.2 International Standards	1
3 Abbreviations and Conventions	2
4 List of Documents	2
5 MOF Usage Scenarios	3
5.1 Overview	3
5.2 Software Development Scenarios	4
5.3 Type Management Scenarios	5
5.4 Information Management Scenarios	6
5.5 Data Warehouse Management Scenarios	7
6 MOF Conceptual Overview	9
6.1 Overview	9
6.2 Metadata Architectures	9
6.2.1 Four Layer Metadata Architectures.....	9
6.2.2 The MOF Metadata Architecture	10
6.2.3 MOF Metamodeling Terminology	12
6.3 The MOF Model - Metamodeling Constructs	13
6.3.1 Classes	13
6.3.2 Associations.....	16
6.3.3 Aggregation	17
6.3.4 References.....	18
6.3.5 DataTypes	20
6.3.6 Packages	20
6.3.7 Constraints and Consistency	23
6.3.8 Miscellaneous Metamodeling Constructs	24
6.4 Metamodels and Mappings	25
6.4.1 Abstract and Concrete Mappings	25
6.4.2 The MOF Metamodel to IDL Mapping	26
6.4.3 The MOF Metamodel to XML Mappingσ	26
6.4.4 Mappings of the MOF Model.....	27
7 MOF Model and Interfaces	29
7.1 Overview	29
7.2 How the MOF Model is Described	29
7.2.1 Classes	30