

INTERNATIONAL  
STANDARD

ISO/IEC  
19540-2

First edition  
2022-03

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**Information technology — Object  
Management Group Unified  
Architecture Framework (OMG  
UAF) —**

**Part 2:  
Unified Architecture Framework  
Profile (UAFP)**



Reference number  
ISO/IEC 19540-2:2022(E)

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Published in Switzerland

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## **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.

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This document was prepared by the Object Management Group (OMG) (as Unified Architecture Framework [UAF] Domain Metamodel, Version 1.1) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

A list of all parts in the ISO/IEC 19540 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

# Preface

## OMG

Founded in 1989, the Object Management Group, Inc. (OMG) is an open membership, not-for-profit computer industry standards consortium that produces and maintains computer industry specifications for interoperable, portable and reusable enterprise applications in distributed, heterogeneous environments. Membership includes Information Technology vendors, end users, government agencies and academia. OMG member companies write, adopt, and maintain its specifications following a mature, open process. OMG's specifications implement the Model Driven Architecture® (MDA®), maximizing ROI through a full-lifecycle approach to enterprise integration that covers multiple operating systems, programming languages, middleware and networking infrastructures, and software development environments. OMG's specifications include: UML® (Unified Modeling Language™); CORBA® (Common Object Request Broker Architecture); CWM™ (Common Warehouse Metamodel); and industry-specific standards for dozens of vertical markets. More information on the OMG is available at <https://www.omg.org/>.

## OMG Specifications

As noted, OMG specifications address middleware, modeling and vertical domain frameworks. All OMG Specifications are available from this URL: <https://www.omg.org/spec>

Specifications are organized by the following categories:

### **Business Modeling Specifications<sup>[1]</sup>**

#### **Middleware Specifications**

- CORBA/IOP
- Data Distribution Services
- Specialized CORBA IDL/Language Mapping Specifications

#### **Modeling and Metadata Specifications**

- UML, MOF, CWM, XMI
- UML Profile Specifications

#### **Platform Independent Model (PIM) - Platform Specific Model (PSM) - Interface Specifications**

- CORBAServices
- CORBAFacilities
- OMG Domain Specifications
- CORBA Embedded Intelligence Specifications
- CORBA Security Specifications

All of OMG's formal specifications may be downloaded without charge from our website. (Products implementing OMG specifications are available from individual suppliers.) Copies of specifications, available in PostScript and PDF format, may be obtained from the Specifications Catalog cited above or by contacting the Object Management Group, Inc. at: OMG Headquarters 109 Highland Avenue, Needham, MA 02494 USA Tel: +1- 781-444-0404 Fax: +1-781-444-0320 Email: [pubs@omg.org](mailto:pubs@omg.org)

Certain OMG specifications are also available as ISO standards. Please consult <http://www.iso.org>



# Information technology — Object Management Group Unified Architecture Framework (OMG UAF) —

## Part 2: Unified Architecture Framework Profile (UAFP)

### 1 Scope

#### 1.1 Introduction

##### 1.1.1 Overview

This document is a normative supplement to the UAF DMM document (c4i/19-06-16).

This document specifies a UAF profile to enable practitioners to express architectural model elements and organize them in a set of domains, model kinds, and view specification (specified in the UAF DMM) that support the specific needs of end users in defense and commercial industry.

UAFP 1.1 defines a set of stereotypes and model elements and relationships to satisfy the requirements of the UPDM 3.0 RFP and the UAF DMM. The profile specification documents the language architecture in terms of UML profiling mechanism.

A number of UAFP stereotypes inherit from SysML stereotypes where reuse of SysML semantics is necessary. The reusable portions of the SysML specification are not included directly in the specification but are made explicit through the stereotype inheritance.