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First edition  
2010-09-01

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## **Industrial automation systems and integration — Service interface for testing applications —**

### **Part 2: Resource management service interface**

*Systèmes d'automatisation industrielle et intégration — Interface de  
service pour contrôler les applications —*

*Partie 2: Interface de service pour la gestion de ressource*



Reference number  
ISO 20242-2:2010(E)

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Published in Switzerland

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## Contents

Page

Foreword .....	iv
Introduction.....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Symbols and abbreviated terms .....	1
5 Conventions for service definitions and procedures .....	2
5.1 General .....	2
5.2 Parameters .....	2
5.3 Service procedures .....	3
5.4 Service primitives and state diagrams .....	3
6 Resource Management Services .....	4
6.1 Overview.....	4
6.2 List of services .....	5
6.3 Management support services.....	7
6.4 Input/output services .....	11
6.5 Extended services .....	28
6.6 Operating Support Services .....	32
6.7 States of RMS state machine .....	60
Annex A (informative) Implementation guidelines for RMSI — Mapping of services to C/C++ function calls .....	64
Annex B (informative) Cascading of device drivers via RMSI.....	77
Bibliography.....	79

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 20242-2 was prepared by Technical Committee ISO/TC 184, *Automation systems and integration*, Subcommittee SC 5, *Architecture, communications and integration frameworks*.

ISO 20242 consists of the following parts, under the general title *Industrial automation systems and integration — Service interface for testing applications*:

- *Part 1: Overview*
- *Part 2: Resource management service interface*

The following parts are planned:

- *Part 3: Virtual device service interface*
- *Part 4: Device capability profile template*
- *Part 5: Application program service interface*
- *Part 6: Conformance test methods, criteria and reports*

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## Introduction

The motivation for ISO 20242 stems from international automotive industries and their suppliers to facilitate the integration of automation and measurement devices, and other peripheral components for this purpose, into computer-based applications. It defines rules for the construction of device drivers and their behaviour in the context of an automation application, or a measurement application, or an automation and measurement application.

The main goal of ISO 20242 is to provide users with:

- independence from the computer operating system;
- independence from the device connection technology (device interface/network);
- independence from device suppliers;
- the ability to certify device drivers with connected devices and their behaviour in the context of a given computer platform;
- independence from the technological device development in the future.

ISO 20242 will not force the development of new device families or the use of special interface technologies (networks). It encapsulates a device and its communication interface to make it compatible with other devices of that kind for a given application.