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**Information technology — Device  
control and management —**

Part 2:  
**Specification of Device Control and  
Management Protocol**

*Technologies de l'information — Commande et gestion de  
périphériques —*

*Partie 2: Spécifications du protocole de commande et gestion de  
périphériques*



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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. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

ISO/IEC 17811-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology SC 6, Telecommunications and information exchange between systems*.

## Introduction

This International Standard provides the architecture for device control and management (DCM). DCM can support the various control and management services, regardless of the network protocols or interfaces. DCM is composed of two protocols; device control and management protocol (DCMP) and reliable message delivery protocol (RMDP).

This International Standard, ISO/IEC 17811, consists of the following parts:

- Part 1: Architecture
- Part 2: Specification of Device Control and Management Protocol
- Part 3: Specification of Reliable Message Delivery Protocol

ISO/IEC 17811-1 describes the architecture of DCM, which includes definition, general concept, requirements, design principles, service scenarios for device management control, and management.

ISO/IEC 17811-2 specifies the Device Control and Management Protocol (DCMP), which includes the functional entities, protocol operations, message structure, and detailed parameter format associated with DCMP.

ISO/IEC 17811-3 specifies the Reliable Message Delivery Protocol (RMDP), which includes the interworking with DCMP, protocol operations, and message structure associated with RMDP.

The International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this International Standard may involve the use of a patent concerning the message structure of DCMP given in Clause 7.

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# Information technology — Device control and management —

## Part 2: Specification of Device Control and Management Protocol

### 1 Scope

This part of ISO/IEC 17811 provides the specification of Device Control and Management Protocol (DCMP), which is an application-layer protocol used to control and manage the various devices. DCMP supports the device and network status information retrieval, device initialization, firmware and software update, file transmission, and so on. This part of ISO/IEC 17811 specifies the protocol operations and message structure of DCMP.

The network security is out of scope in this part of ISO/IEC 17811. However, the security services can be necessary according to applications of DCMP. DCMP can suffer from many network specific threats. To countermeasure those threats, some security mechanism can be deployed.