

INTERNATIONAL STANDARD

**Multimedia home network configuration – Basic reference model
Part 2: Operational model**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MULTIMEDIA HOME NETWORK CONFIGURATION –
BASIC REFERENCE MODEL****Part 2: Operational model**

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International Standard IEC 62608-2 has been prepared by technical area 8: Multimedia home systems and applications for end-user network, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this International Standard is based on the following documents:

| CDV | Report on voting |
|--------------|------------------|
| 100/2812/CDV | 100/2902/RVC |

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62608 series, published under the general title *Multimedia home network configuration*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

Network connectivity is necessary for using electronic devices at home as well as electronic power. Some applications running on the devices do not work without a home network and the Internet. When a device connects to the home network, it is required that an appropriate network service be already provided. Sometimes, applications need to change the configuration of the device, the gateway, and so on. Since it is too difficult to change the configuration of the device manually, an automatic configuration mechanism is needed for home networks.

This document specifies the basic reference model to configure the devices connected to the home network. The purpose of this document is to provide the configuration framework for network applications running on the devices.

Part 1 specifies the basic reference model. Part 2 specifies the protocol between each component. Part 3 specifies the metadata and data model exchanged on the protocol. Part 4 provides security guidelines for the reference model.

The reference model is structured by existing protocols and web technologies.

The network service designed as a distributed system works in a coordinated manner with each system. It is difficult to manage whole systems because each system operates independently with different managers. The configurator manages the home network to provide a stable network service for consumer electronics.

Various protocols for cable, data link, and IP networks are specified by each standards organization. This document adopts existing protocols to manage configurations for consumer electronics.

MULTIMEDIA HOME NETWORK CONFIGURATION – BASIC REFERENCE MODEL

Part 2: Operational model

1 Scope

This document specifies the operational model for home network configuration.

In the home network, various CE devices that have distinctive functions are connected on a shared network. However, there is no manager in the home network. Thus, a standardized network management procedure is required for suitable network operation.

This document specifies the management procedure as sequences. The sequences are typical procedures of management. This document also describes implementation requirements, and the protocols between each component.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

home network

network that connects equipment to be configured in the model; the network is built mainly in a home

3.2

home gateway

equipment that relays communication from target equipment to the outside of the home network

3.3

configurator

entity that configures equipment

3.4

configured agent

entity that sends configuration information to the configurator