IEC 62608-1

Edition 2.0 2025-07

INTERNATIONAL STANDARD

Multimedia home network configuration - Basic reference model - Part 1: System model

ICS 33.160.60

ISBN 978-2-8327-0515-5

IEC 62608-1:2025-07(en)

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

Multimedia home network configuration - Basic reference model - Part 1: System model

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 62608-1 has been prepared by subcommittee TA 18: Multimedia home systems and applications for end-user networks, of IEC technical committee TC 100: Audio, video and multimedia systems and equipment. It is an International Standard.

This second edition cancels and replaces the first edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) addition of devices connected via wireless LAN;
b) addition of servers on the cloud.

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

Draft	Report on voting
100/4200/CDV	100/4302/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

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

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

Electronic power, as well as network connectivity, is necessary in order to use electronic devices at home. Some applications running on the devices do not work without an inside and outside network.

When a device connects to a home network, an appropriate network service must already be in place. Since network connections are a precondition of many applications, such as the applications in IEC 62481-1, IEC 62481-2 and IEC 6248-3, a digital living network alliance (DLNA) network management function is necessary.

Sometimes applications are asked to change the configuration of another device, gateway, and so on. Since it is too difficult to change the configuration of the device manually, an automatic configuration mechanism is needed for the home network. IEC 62514 defines the functions of a multimedia home gateway; this document complements the multimedia home gateway by establishing network connection automatically.

This document expands the scope of management to include devices connected via wireless LAN and servers on the cloud.

1 Scope

This part of IEC 62608 specifies the basic reference model to configure devices connected to a home network with a configuration framework for network applications running on such devices.

This document applies to devices that are cable or wireless LAN connected and switched on and that support IP protocol. The reference model covers inside and outside network connectivity.

This document specifies the system model and functions that each component should support.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62608-2, *Multimedia home network configuration – Basic reference model – Part 2: Operational model*