



SLOVENSKI STANDARD

SIST EN 62842:2016

01-marec-2016

Sistem dodeljevanja datotek s čim manjšo prerazporeditvijo za multimedijski domači strežnik (TA 8) (IEC 62842:2015)

File allocation system with minimized reallocation for multimedia home server (TA 8) (IEC 62842:2015)

Multimedia-Homeserversysteme - System zur Dateizuordnung mit minimaler Umverteilung (IEC 62842:2015)

Système d'allocation de fichiers avec réallocation minimisée pour serveur domestique multimedia (IEC 62842:2015)

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Ta slovenski standard je istoveten z: EN 62842:2015

ICS:

33.160.60 Večpredstavni (multimedijski) Multimedia systems and sistemi in oprema za telekonferenca teleconferencing equipment telekonference

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EUROPEAN STANDARD

EN 62842

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 33.160.60

English Version

**File allocation system with minimized reallocation for multimedia
home server (TA 8)
(IEC 62842:2015)**

Système d'allocation de fichiers avec réallocation minimisée
pour serveur domestique multimedia
(IEC 62842:2015)

Multimedia-Homeserversysteme - System zur
Dateizuordnung mit minimaler Umverteilung
(IEC 62842:2015)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 62842:2015**European foreword**

The text of document 100/2367/CDV, future edition 1 of IEC 62842, prepared by Technical Area 8 "Multimedia home systems and applications for end-use network" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62842:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-07-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-10-14

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u> series	<u>Title</u>	<u>EN/HD</u>	<u>Year</u> series
ISO/IEC 13346	series	Information technology - Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange	-	
ISO/IEC 13346-1	1995	Information technology - Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange -- Part 1: General	-	-
ISO/IEC 13346-3	1999	Information technology - Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange - Part 3: Volume structure	-	-
ISO/IEC 13346-4	1999	Information technology - Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange - Part 4: File structure	-	-

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INTERNATIONAL STANDARD

**Multimedia home server systems – File allocation system with minimized
reallocation**

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.160.60

ISBN 978-2-8322-2843-2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MULTIMEDIA HOME SERVER SYSTEMS –
FILE ALLOCATION SYSTEM WITH MINIMIZED REALLOCATION**
FOREWORD

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International Standard IEC 62842 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 technical report is based on the following documents:

CDV	Report on voting
100/2367/CDV	100/2459/RVC

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

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

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

Recently, hard disk and Blu-ray Disc¹ recorders have become popular in the home to record television programmes. Normally a Hard Disk Recorder (HDR) is used for time shift and a Blu-ray Disc (BD) is used for library. When an HDR is used for time shift, television programmes are recorded and played, then many of them are deleted to reuse the spaces for other programmes to be recorded. These programmes are stored as files in a hard disk drive (HDD) using a file system. Continuous recording and deletion of programmes involves the continuous storing and deletion of files in the file system. Television programme streams include at least videos and an electronic programme guide (EPG). The HDR stores videos in a long, variable length file depending on the quality and recording hours. Compared with videos, EPG related information is stored in a shorter file or files but is often updated. This continuous creation, deletion and updating of files of different lengths finally causes the files to be stored in fragments, and the system performance becomes very low.

In a computer, defragmentation tools are provided to solve the problem of a fragmented file system. Normally defragmentation with reallocation of files in sequence takes a long time and the end user cannot but wait for the completion of the defragmentation, with no other activity. In the home server environment, a smarter solution to resolve this problem needs to be provided.

The recent newly developed HDD features will be reflected in the next version of the standard.

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