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INTERNATIONAL STANDARD



**Digital living network alliance (DLNA) home networked device interoperability
guidelines –
Part 7: Authentication**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIGITAL LIVING NETWORK ALLIANCE (DLNA) HOME
NETWORKED DEVICE INTEROPERABILITY GUIDELINES –**

Part 7: Authentication

FOREWORD

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International Standard IEC 62481-7 has been prepared under 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
100/2744/CDV	100/2889/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 of IEC 62481 series, published under the general title *Digital Living Network Alliance (DLNA) home networked device interoperability guidelines*, 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- withdrawn,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

Consumers are acquiring, viewing, and managing an increasing amount of digital media (photos, music, and video) on devices in the consumer electronics (CE), mobile, and personal computer (PC) domains. As such, they want to conveniently enjoy the content, regardless of the source, across different devices and locations in the home. The digital home vision integrates the Internet, mobile, and broadcast networks through a seamless, interoperable network, which will provide a unique opportunity for manufacturers and consumers alike. In order to deliver on this vision, a common set of industry design guidelines is needed that allows vendors to participate in a growing marketplace, leading to more innovation, simplicity, and value for consumers. This document serves that purpose and provides vendors with the information needed to build interoperable networked platforms and devices for the digital home.

DIGITAL LIVING NETWORK ALLIANCE (DLNA) HOME NETWORKED DEVICE INTEROPERABILITY GUIDELINES –

Part 7: Authentication

1 Scope

This part of IEC 62481 specifies DLNA interoperability guidelines for device authentication.

The DLNA interoperability guidelines are based on a device authentication solution, which is defined as methods to enable authentication of a client device as DLNA Certified. Methods are included to allow a client device to authenticate a server device as trusted by a Certificate Authority.

The guidelines are intended to supplement other interoperability mechanisms already defined for DLNA link protection and DLNA DRM interoperability solutions.

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 62481-1-1:2017, *Digital living network alliance (DLNA) home networked device interoperability guidelines – Part 1-1: Architecture and protocols*

IETF RFC 2616, *Hypertext Transfer Protocol*,
<http://www.ietf.org/rfc/rfc2616.txt>

IETF RFC 2818, *HTTP over TLS, Informational*,
<http://tools.ietf.org/html/rfc2818>

IETF RFC 4680, *TLS Handshake Message for Supplemental Data*,
<http://tools.ietf.org/html/rfc4680>

IETF RFC 5246, *Transport Layer Security (TLS) Protocol*,
<http://tools.ietf.org/html/rfc5246>

IETF RFC 5280, *Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile*,
<http://tools.ietf.org/html/rfc5280>

IETF RFC 5878, *Transport Layer Security (TLS) Authorization Extensions*,
<http://tools.ietf.org/html/rfc5878>

IETF RFC 7562, *Authentication Credential Exchange Using TLS Supplemental Data*,
<https://tools.ietf.org/html/rfc7562>

DTCP Volume 1 (informational version), *Digital Transmission Content Protection Specification Volume 1, Revision 1.7*.
<http://www.dtcp.com/documents/dtcp/info-20111214-dtcp-v1-rev-1-p-7.pdf>