
**Information technology — Dynamic
adaptive streaming over HTTP (DASH) —**

**Part 1:
Media presentation description and
segment formats**

*Technologies de l'information — Diffusion en flux adaptatif dynamique
sur HTTP (DASH) —*

*Partie 1: Description de la présentation et formats de remise des
médias*



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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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ISO/IEC 23009-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

ISO/IEC 23009 consists of the following parts, under the general title *Information technology — Dynamic adaptive streaming over HTTP (DASH)*:

— *Part 1: Media presentation description and segment formats*

Introduction

Dynamic Adaptive Streaming over HTTP (DASH) is intended to support a media-streaming model for delivery of media content in which control lies exclusively with the client. Clients may request data using the HTTP protocol from standard web servers that have no DASH-specific capabilities. Consequently, this part of ISO/IEC 23009 focuses not on client or server procedures but on the data formats used to provide a DASH Media Presentation.

This part of ISO/IEC 23009 primarily specifies formats for the Media Presentation Description and Segments. It is applicable to streaming services over the Internet.

Information technology — Dynamic adaptive streaming over HTTP (DASH) —

Part 1: Media presentation description and segment formats

1 Scope

This part of ISO/IEC 23009 primarily specifies formats for the Media Presentation Description and Segments for dynamic adaptive streaming delivery of MPEG media over HTTP. It is applicable to streaming services over the Internet.

2 Normative references

The following referenced documents are indispensable for the application 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.

ITU-T Rec. H.222.0 | ISO/IEC 13818-1, *Information technology – Generic coding of moving pictures and associated audio information: Systems*

ISO/IEC 14496-10, *Information technology – Coding of audio-visual objects – Part 10: Advanced Video Coding*

ISO/IEC 14496-12, *Information technology – Coding of audio-visual objects – Part 12: ISO base media file format (technically identical to ISO/IEC 15444-12)*

ISO/IEC 23003-3, *Information technology – MPEG audio technologies – Part 3: Unified speech and audio coding*

IETF RFC 1521, *MIME (Multipurpose Internet Mail Extensions) Part One: Mechanisms for Specifying and Describing the Format of Internet Message Bodies*, September 1993

IETF RFC 1738, *Uniform Resource Locators (URL)*, December 1994

IETF RFC 2141, *URN Syntax*, May 1997

IETF RFC 2616, *Hypertext Transfer Protocol – HTTP/1.1*, June 1999

IETF RFC 3023, *XML Media Types*, January 2001

IETF RFC 3406, *Uniform Resource Names (URN) Namespace Definition Mechanisms*, October 2002

IETF RFC 3986, *Uniform Resource Identifier (URI): Generic Syntax*, January 2005

IETF RFC 4122, *A Universally Unique IDentifier (UUID) URN Namespace*, July 2005

IETF RFC 4337, *MIME Type Registration for MPEG-4*, March 2006

IETF RFC 5646, *Tags for Identifying Languages*, September 2009

IETF RFC 6381, *The 'Codecs' and 'Profiles' Parameters for "Bucket" Media Types*, August 2011

W3C XLINK XML Linking Language (XLink) Version 1.1, W3C Recommendation 06, May 2010