

SMPTE STANDARD

Media Dispatch Protocol (MDP) —
Basic Target Pull
Profile Specification



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Foreword

SMPTE (the Society of Motion Picture and Television Engineers) is an internationally-recognized standards developing organization. Headquartered and incorporated in the United States of America, SMPTE has members in over 80 countries on six continents. SMPTE's Engineering Documents, including Standards, Recommended Practices and Engineering Guidelines, are prepared by SMPTE's Technology Committees. Participation in these Committees is open to all with a bona fide interest in their work. SMPTE cooperates closely with other standards-developing organizations, including ISO, IEC and ITU.

SMPTE Engineering Documents are drafted in accordance with the rules given in Part XIII of its Administrative Practices.

SMPTE Standard 2032-3 was prepared by Technology Committee S22 on Committee on Television Systems Technology.

Introduction

This section is entirely informative and does not form an integral part of this document.

The Media Dispatch Protocol (MDP) is a means of orchestrating the delivery of media files over IP networks. It defines a standard mechanism for implementations to initiate a delivery, to negotiate the details of the delivery, to provide information about the progress of the delivery, and to provide a confirmation of the outcome of the delivery.

MDP allows organizations to transfer files at agreed times, using agreed transfer protocols, and using an agreed set of secure technologies (where appropriate). However, the protocol is not overly prescriptive in regards to which protocols or technologies shall be used; rather it provides a framework which allows organizations to choose those that best suit their own needs.

MDP is a multi-part standard:

Part 1, the MDP protocol specification, defines the logical messages, data structures and data dictionary of MDP.

Part 2, an MDP mapping specification, defines a representation of the messages and structures defined in Part 1.

Part 3, of which this document is part, defines subsets of the protocol and rules on the use of these subsets.

Part 4, the MDP Engineering Guideline, introduces and describes MDP and how it can be used in particular scenarios.

1 Scope

This standard defines the MDP Basic Target Pull Profile. This specifies a subset of the MDP protocol defined in SMPTE 2032-1, in which the name and size of all files is known to the initiating agent before the transaction is initiated, the target agent initiates the file transfers, and all transfers use a pull-mode protocol.

The standard specifies the sequence of messages that shall or may be used in a transaction, how certain properties shall be set in the manifest document, how the file transfers shall be initiated, and which transfer protocols an agent shall support.

2 Conformance Notation

Normative text is text that describes elements of the design that are indispensable or contains the conformance language keywords: "shall", "should", or "may". Informative text is text that is potentially helpful to the user, but not indispensable, and can be removed, changed, or added editorially without affecting interoperability. Informative text does not contain any conformance keywords.

All text in this document is, by default, normative, except: the Introduction, any section explicitly labeled as "Informative" or individual paragraphs that start with "Note:"

The keywords "shall" and "shall not" indicate requirements strictly to be followed in order to conform to the document and from which no deviation is permitted.

The keywords, "should" and "should not" indicate that, among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others; or that a certain course of action is preferred but not necessarily required; or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.

The keywords "may" and "need not" indicate courses of action permissible within the limits of the document.

The keyword "reserved" indicates a provision that is not defined at this time, shall not be used, and may be defined in the future. The keyword "forbidden" indicates "reserved" and in addition indicates that the provision will never be defined in the future.

A conformant implementation according to this document is one that includes all mandatory provisions ("shall") and, if implemented, all recommended provisions ("should") as described. A conformant implementation need not implement optional provisions ("may") and need not implement them as described.

3 Normative Reference

The following standard contains provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below.

SMPTE 2032-1-2007, Media Dispatch Protocol (MDP) — Protocol Specification

4 Acronyms and Definitions

The full glossary of acronyms and definitions used in the MDP specification is given in the MDP protocol specification (SMPTE 2032-1). It is not repeated here to avoid any divergence of meaning.