
Information technology — MPEG systems technologies —

Part 5:
Bitstream Syntax Description Language (BSDL)

*Technologies de l'information — Technologies des systèmes MPEG —
Partie 5: Langage de description de la syntaxe bitstream (BSDL)*

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Contents

Page

Foreword.....	v
Introduction	vi
1 Scope	1
2 Normative References	1
3 Terms, definitions and abbreviated terms	1
3.1 Terms and definitions.....	1
3.2 Abbreviated terms	2
4 Schema documents	2
4.1 General.....	2
4.2 Use of prefixes in this specification	2
4.3 XML, Schema, XML Schema overview.....	3
4.4 BS Description, BS Schema, BSDL	4
4.4.1 BS Description	4
4.4.2 BS Schema	5
4.4.3 BSDL	7
4.4.4 BSDL parsers: BSDtoBin and BintobSD	8
4.4.5 Advanced use of BS Descriptions	10
4.5 Examples of applications for BSDL	11
4.6 Relation with ISO/IEC 21000-7	11
5 BSDL-1 and BSDtoBin.....	12
5.1 Constraints on BS Descriptions.....	12
5.2 Datatypes in BSDL.....	13
5.2.1 Overview	13
5.2.2 Extension datatypes	13
5.2.3 Facets.....	13
5.2.4 Simple type derivation.....	14
5.2.5 XML Schema built-in datatypes supported by BSDL.....	14
5.2.6 BSDL built-in datatypes	15
5.3 BSDL-1 attributes.....	18
5.3.1 Overview	18
5.3.2 bs1:ignore attribute	19
5.3.3 bs1:bitstreamURI attribute.....	20
5.3.4 bs1:addressUnit attribute	21
5.3.5 bs1:codec attribute.....	22
5.3.6 bs1:requiredExtensions attribute	23
5.3.7 bs1:insertEmPrevByte attribute	24
5.3.8 bs1:bsdVersion attribute	25
5.4 bs1:script element	26
5.5 Schema for BSDL-1 Extensions	26
5.6 Bitstream generation with BSDtoBin.....	32
5.6.1 Processing model.....	32
6 BSDL-2 and BintobSD.....	33
6.1 Overview	33
6.1.1 Introduction	33
6.1.2 Annotation mechanisms of XML Schema	33
6.1.3 Facets.....	34
6.1.4 XPath expressions.....	34
6.1.5 bs2:log2() XPath function	35
6.1.6 XPath variables assignment	35

6.2	BSDL-2 attributes	36
6.2.1	bs2:nOccurs	36
6.2.2	bs2:if attribute	36
6.2.3	bs2:ifNext, bs2:ifNextMask and bs2:ifNextSkip attributes	37
6.2.4	bs2:rootElement attribute	40
6.2.5	bs2:removeEmPrevByte attribute	41
6.2.6	bs2:defaultTreeInMemory, bs2:startContext, bs2:stopContext, bs2:partContext, bs2:redefineMarker attributes	41
6.2.7	bs2:layerLength attribute	44
6.2.8	bs2:assignPre and bs2:assignPost attributes	45
6.2.9	bs2:bsdlVersion attribute	46
6.2.10	bs2:requiredExtensions attribute	47
6.3	BSDL-2 facets	47
6.3.1	bs2:length facet	47
6.3.2	bs2:bitLength facet	48
6.3.3	bs2:startCode and bs2:endCode facets	49
6.3.4	bs2:escape and bs2:cdata facets	50
6.4	Other BSDL-2 schema components	51
6.4.1	bs2:ifUnion component	51
6.4.2	bs2:parameter component	53
6.4.3	bs2:xpathScript component	53
6.4.4	bs2:variable component (optional feature)	54
6.5	Schema for Schema for BSDL-2 Extensions	56
6.6	BintoBSD Parser	59
6.6.1	Processing model	59
6.6.2	BSDL-2 validity of BS Schemas	61
Annex A	(normative) ECMAScript implementation of extension datatypes	62
A.1	Overview	62
A.2	BSDL-defined ECMAScript functions	63
Annex B	(informative) Non-normative feature for BSDL	65
B.1	Introduction	65
B.2	Non-normative BSDL-1 attribute	65
B.2.1	bs1i:implementation attribute	65
B.3	Schema for non-normative BSDL-1 Extensions	66
B.4	Non-normative BSDL-2 attributes	66
B.4.1	bs2i:debugMsg, bs2i:debugBool, bs2i:debugInt, bs2i:debugNumber and bs2i:debugStr attributes	66
B.5	Schema for non-normative BSDL-2 Extensions	67
Annex C	(informative) Parsing process for Exp-Golomb codes	68
Bibliography	70

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 23001-5 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 23001 consists of the following parts, under the general title *Information technology — MPEG systems technologies*:

- *Part 1: Binary MPEG format for XML*
- *Part 2: Fragment request units*
- *Part 3: XML IPMP messages*
- *Part 4: Codec configuration representation*
- *Part 5: Bitstream Syntax Description Language (BSDL)*

Introduction

This international standard specifies BSDL (Bitstream Syntax Description Language), a language based on W3C XML Schema to describe the structure of a bitstream with an XML document named BS Description.

BSDL provides a normative grammar to describe in XML the high-level syntax of a bitstream; the resulting XML document is called a Bitstream Syntax Description (BS Description, BSD). This description is not meant to replace the original binary format, but acts as an additional layer, similar to metadata. In most cases, it will not describe the bitstream on a bit-per-bit basis, but rather address its high-level structure, e.g., how the bitstream is organized in layers or packets of data. Furthermore, the BS Description is itself scalable, which means it may describe the bitstream at different syntactic layers, e.g., finer or coarser levels of detail, depending on the application.

This language was initially developed in the context of Digital Item Adaptation (ISO/IEC 21000-7) as a generic tool for adapting scalable multimedia content. However, its use is not restricted to adaptation and may be relevant for any application parsing a bitstream. This is why this International Standard extracts the BSDL specification from ISO/IEC 21000-7 to make it available to other contexts.

Information technology — MPEG systems technologies —

Part 5: Bitstream Syntax Description Language (BSDL)

1 Scope

This part of ISO/IEC 23001 specifies BSDL (Bitstream Syntax Description Language), a language based on W3C XML Schema to describe the structure of a bitstream with an XML document named BS Description.

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