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BSI Standards Publication

## Document management — ECMAScript for PDF

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Part 1: Use of ISO 32000-2 (PDF 2.0)

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## National foreword

This British Standard is the UK implementation of ISO 21757-1:2020.

The UK participation in its preparation was entrusted to Technical Committee IDT/1, Document Management Applications.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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# Document management — ECMAScript for PDF —

## Part 1: Use of ISO 32000-2 (PDF 2.0)



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## Contents

Page

<b>Foreword</b> .....	<b>ix</b>
<b>Introduction</b> .....	<b>x</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Notation</b> .....	<b>1</b>
<b>5 Syntax</b> .....	<b>2</b>
5.1 General.....	2
5.2 Method arguments.....	2
<b>6 Paths</b> .....	<b>2</b>
<b>7 Safe path</b> .....	<b>2</b>
<b>8 Privileged context</b> .....	<b>3</b>
<b>9 Privileged versus non-privileged context</b> .....	<b>3</b>
<b>10 ECMAScript API</b> .....	<b>3</b>
10.1 General.....	3
10.2 Annotation.....	3
10.2.1 General.....	3
10.2.2 Annotation types.....	4
10.2.3 Annotation properties.....	5
10.2.4 Annotation methods.....	13
10.2.5 Annotation examples.....	15
10.3 AnnotRichMedia.....	17
10.3.1 General.....	17
10.3.2 AnnotRichMedia properties.....	17
10.4 Annot3D.....	17
10.4.1 General.....	17
10.4.2 Annot3D properties.....	17
10.5 app.....	18
10.5.1 General.....	18
10.5.2 app properties.....	18
10.5.3 app methods.....	20
10.6 Bookmark.....	30
10.6.1 General.....	30
10.6.2 Bookmark properties.....	30
10.6.3 Bookmark methods.....	31
10.6.4 Bookmark Examples.....	32
10.7 Certificate.....	33
10.7.1 General.....	33
10.7.2 Certificate properties.....	34
10.8 color.....	36
10.8.1 General.....	36
10.8.2 color arrays.....	36
10.8.3 color properties.....	36
10.8.4 color methods.....	37
10.9 collection.....	38
10.9.1 General.....	38
10.9.2 collection properties.....	38
10.9.3 collection methods.....	38
10.10 collectionField.....	40
10.10.1 General.....	40

This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

10.10.2	collectionField properties.....	40
10.11	Data.....	41
10.11.1	General.....	41
10.11.2	Data properties.....	42
10.11.3	Data methods.....	42
10.12	Dialog.....	43
10.12.1	General.....	43
10.12.2	Dialog methods.....	43
10.13	Doc.....	44
10.13.1	General.....	44
10.13.2	Doc properties.....	45
10.13.3	Doc methods.....	49
10.14	Embedded PDF.....	89
10.14.1	General.....	89
10.14.2	Embedded PDF properties.....	90
10.14.3	Embedded PDF methods.....	91
10.15	Error.....	91
10.15.1	General.....	91
10.15.2	Error properties.....	92
10.15.3	Error methods.....	92
10.16	event.....	93
10.16.1	General.....	93
10.16.2	Event type/name combinations.....	93
10.16.3	Document Event Processing.....	99
10.16.4	Form event processing.....	99
10.16.5	event properties.....	100
10.17	Field.....	105
10.17.1	General.....	105
10.17.2	Field versus widget attributes.....	106
10.17.3	Field properties.....	106
10.17.4	Field methods.....	118
10.18	FullScreen.....	135
10.18.1	General.....	135
10.18.2	FullScreen properties.....	135
10.19	global.....	136
10.19.1	General.....	136
10.19.2	Creating global properties.....	136
10.19.3	Deleting global properties.....	137
10.19.4	Global object security policy.....	137
10.19.5	global object methods.....	137
10.20	HostContainer.....	138
10.20.1	General.....	138
10.20.2	HostContainer properties.....	139
10.20.3	HostContainer methods.....	140
10.21	Icon.....	141
10.21.1	General.....	141
10.21.2	icon Properties.....	141
10.22	Link.....	141
10.22.1	General.....	141
10.22.2	Link properties.....	141
10.22.3	Link methods.....	142
10.23	Net.....	142
10.23.1	General.....	142
10.23.2	Net properties.....	142
10.23.3	Net methods.....	144
10.24	OCG.....	146
10.24.1	General.....	146
10.24.2	OCG properties.....	146

This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

10.24.3	OCG methods.....	147
10.25	PrintParams.....	148
10.25.1	General.....	148
10.25.2	PrintParams properties.....	148
10.26	RDN.....	151
10.26.1	General.....	151
10.26.2	RDN properties.....	152
10.27	ReadStream.....	152
10.27.1	General.....	152
10.27.2	ReadStream methods.....	152
10.28	security.....	153
10.28.1	General.....	153
10.28.2	security constants.....	153
10.28.3	security Properties.....	153
10.28.4	security Methods.....	154
10.29	SecurityHandler.....	157
10.29.1	General.....	157
10.29.2	SecurityHandler properties.....	157
10.29.3	SecurityHandler methods.....	160
10.30	SecurityPolicy.....	163
10.30.1	General.....	163
10.30.2	SecurityPolicy properties.....	163
10.31	SignatureInfo.....	163
10.31.1	General.....	163
10.31.2	SignatureInfo Base properties.....	163
10.31.3	SignatureInfo object public key security handler properties.....	165
10.31.4	Modification Detection and Prevention (MDP) Values.....	168
10.32	SOAP.....	168
10.32.1	General.....	168
10.32.2	SOAP properties.....	169
10.32.3	SOAP methods.....	169
10.33	Span.....	181
10.33.1	General.....	181
10.33.2	Span properties.....	181
10.34	Template.....	183
10.34.1	General.....	183
10.34.2	Template properties.....	183
10.34.3	Template methods.....	183
10.35	Thermometer.....	184
10.35.1	General.....	184
10.35.2	Thermometer properties.....	184
10.35.3	Thermometer methods.....	185
10.36	this.....	185
10.36.1	General.....	185
10.36.2	Variable and function name conflicts.....	186
10.37	util.....	186
10.37.1	General.....	186
10.37.2	util methods.....	186
<b>11</b>	<b>ECMAScript 3D API.....</b>	<b>193</b>
11.1	General.....	193
11.1.1	Basic Objects.....	193
11.1.2	Scene object.....	193
11.1.3	Canvas object.....	193
11.1.4	Runtime object.....	194
11.1.5	Resource objects.....	194
11.2	Event handlers.....	194
11.2.1	General.....	194
11.2.2	CameraEvent.....	194

This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

11.2.3	KeyEvent	194
11.2.4	MouseEvent	194
11.2.5	RenderEvent	195
11.2.6	ScrollWheelEvent	195
11.2.7	SelectionEvent	195
11.2.8	TimeEvent	195
11.2.9	ToolEvent	195
<b>12</b>	<b>Object overview</b>	<b>196</b>
12.1	General	196
12.2	Animation	196
12.2.1	General	196
12.2.2	Animation properties	196
12.3	Background	196
12.3.1	General	196
12.3.2	Background object properties	196
12.3.3	Background object methods	196
12.4	BoundingBox	197
12.4.1	General	197
12.4.2	BoundingBox properties	197
12.5	Camera	197
12.5.1	General	197
12.5.2	Camera properties	198
12.5.3	Camera methods	199
12.6	CameraEvent	199
12.6.1	General	199
12.6.2	CameraEvent properties	199
12.7	CameraEventHandler	200
12.7.1	General	200
12.7.2	CameraEventHandler methods	200
12.8	Canvas	201
12.8.1	General	201
12.8.2	Canvas properties	201
12.8.3	Canvas methods	201
12.9	ClippingPlane	202
12.9.1	General	202
12.9.2	ClippingPlane Methods	202
12.10	Color	202
12.10.1	General	202
12.10.2	Color properties	202
12.10.3	Color methods	202
12.11	HitInfo	203
12.11.1	General	203
12.11.2	HitInfo properties	204
12.12	Host	204
12.12.1	General	204
12.13	Image	204
12.13.1	General	204
12.13.2	Image properties	204
12.13.3	Image methods	204
12.14	KeyEvent	205
12.14.1	General	205
12.14.2	KeyEvent properties	205
12.15	KeyEventHandler	207
12.15.1	General	207
12.15.2	KeyEventHandler methods	208
12.16	Light	208
12.16.1	General	208
12.16.2	Light properties	208



This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

12.17	Material .....	209
	12.17.1 General .....	209
	12.17.2 Material properties .....	209
12.18	Matrix4x4 .....	210
	12.18.1 General .....	210
	12.18.2 Matrix4x4 Properties .....	210
	12.18.3 Matrix4x4 Methods .....	211
12.19	Mesh .....	219
	12.19.1 General .....	219
	12.19.2 Mesh properties .....	219
	12.19.3 Mesh methods .....	219
12.20	MouseEvent .....	220
	12.20.1 General .....	220
	12.20.2 MouseEvent properties .....	220
12.21	MouseEventHandler .....	221
	12.21.1 General .....	221
	12.21.2 MouseEventHandler properties .....	221
	12.21.3 MouseEventHandler methods .....	222
12.22	Node .....	222
	12.22.1 General .....	222
	12.22.2 Node properties .....	223
	12.22.3 Node methods .....	223
12.23	Quaternion .....	224
	12.23.1 General .....	224
	12.23.2 Quaternion methods .....	224
12.24	RenderEvent .....	226
	12.24.1 General .....	226
	12.24.2 RenderEvent properties .....	226
12.25	RenderEventHandler .....	226
	12.25.1 General .....	226
	12.25.2 RenderEventHandler methods .....	226
12.26	Resource .....	228
	12.26.1 General .....	228
	12.26.2 Resource properties .....	228
	12.26.3 Resource methods .....	228
12.27	Runtime .....	228
	12.27.1 General .....	228
	12.27.2 Runtime properties .....	228
	12.27.3 Runtime methods .....	230
12.28	Scene .....	235
	12.28.1 General .....	235
	12.28.2 Scene methods .....	238
12.29	SceneObject .....	240
	12.29.1 General .....	240
12.30	SceneObjectList .....	240
	12.30.1 General .....	240
	12.30.2 SceneObjectList methods .....	240
12.31	ScrollWheelEvent .....	241
	12.31.1 General .....	241
	12.31.2 ScrollWheelEvent .....	241
12.32	ScrollWheelEventHandler .....	242
	12.32.1 General .....	242
	12.32.2 ScrollWheelEventHandler methods .....	242
12.33	SelectionEvent .....	242
	12.33.1 General .....	242
	12.33.2 SelectionEvent properties .....	242
12.34	SelectionEventHandler .....	243
	12.34.1 General .....	243

This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

12.34.2	SelectionEventHandler methods	243
12.35	StateEvent	243
12.35.1	General	243
12.35.2	StateEvent properties	243
12.36	StateEventHandler	244
12.36.1	General	244
12.36.2	StateEventHandler methods	244
12.37	Texture	244
12.37.1	General	244
12.37.2	Texture properties	244
12.38	TimeEvent	245
12.38.1	General	245
12.38.2	TimeEvent properties	245
12.39	TimeEventHandler	245
12.39.1	General	245
12.39.2	TimeEventHandler methods	245
12.40	ToolEvent	246
12.40.1	General	246
12.40.2	ToolEventHandler properties	246
12.41	ToolEventHandler	246
12.41.1	General	246
12.41.2	ToolEventHandler methods	246
12.42	Vector3	247
12.42.1	General	247
12.42.2	Vector3 methods	247
12.43	View	252
12.43.1	General	252
12.43.2	View properties	252
<b>Bibliography</b>		<b>253</b>

This is a preview of "BS ISO 21757-1:2020". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

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## Introduction

This document specifies a set of ECMAScript object types which define the properties and methods that can be used in ECMAScript scripts embedded in PDF documents to automate and interact with the containing PDF document and the PDF objects within such files.

The goal is to enable the implementation of ECMAScript processors within a broad range of PDF Processors to provide interoperable scripting and automation of PDF documents. This functionality includes the following features, among others:

- processing forms within the document;
- batch processing collections of PDF documents;
- developing and maintaining online collaboration schemes;
- communicating with local databases.

Certain properties and methods that may be discoverable through ECMAScript's introspection facilities are not documented here. Undocumented properties and methods should not be used.

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# Document management — ECMAScript for PDF —

## Part 1: Use of ISO 32000-2 (PDF 2.0)

### 1 Scope

This document defines a set of ECMAScript object types for automating and interacting with PDF documents and the contents of such documents.

### 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.

ISO 32000-2, *Document management — Portable Document Format — Part 2: PDF 2.0*

ISO/IEC 22275:2018, *Information technology — Programming languages, their environments, and system software interfaces — ECMAScript® Specification Suite*

ISO/IEC 22537:2006, *Information technology — ECMAScript for XML (E4X) specification*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO 32000-2 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### 3.1

##### **ECMAScript**

means of reference to ISO 22275 and ISO 22537

#### 3.2

##### **SHA**

Secure Hash Algorithms, means of reference to FIPS 180-4

### 4 Notation

ECMAScript objects and properties and other predefined names are written in bold font; values, as well as key terms of interest are written in italic font. Some names can also be used as values, depending on the context, and so the styling of the content will be context specific. Methods, functions, and variables are written in fixed-width font.

EXAMPLE 1 The allowed values for the **projectionType** property are *perspective* and *orthographic*.