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# Information technology — JPEG 2000 image coding system —

## Part 9: Interactivity tools, APIs and protocols

*Technologies de l'information — Système de codage d'images JPEG  
2000 —*

*Partie 9: Outils d'interactivité, interfaces de programmes  
d'application et protocoles*



Reference number  
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This document was prepared by ITU-T (as ITU-T T.808) and drafted in accordance with its editorial rules, in collaboration with Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This second edition cancels and replaces the first edition (ISO/IEC 15444-9:2005), which has been technically revised. It also incorporates the Amendment(s) ISO/IEC 15444-9:2005/Amd 1:2006, ISO/IEC 15444-9:2005/Amd 2:2008, ISO/IEC 15444-9:2005/Amd 3:2008, ISO/IEC 15444-9:2005/Amd 4:2010 and ISO/IEC 15444-9:2005/Amd 5:2014 and the Technical Corrigenda ISO/IEC 15444-9:2005/Cor 1:2007, ISO/IEC 15444-9:2005/Cor 2:2008 and ISO/IEC 15444-9:2005/Cor 3:2011.

The main changes are as follows:

- extends support for the file format specified in Rec. ITU-T T.815 | ISO/IEC 15444-16;
- clarifies normative server responsibilities in response to certain request fields documented in Annex C;
- removes the registration authority (Annex L); and
- adds media type registration information (Annex O).

A list of all parts in the ISO/IEC 15444 series can be found on the ISO and IEC websites.

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## Information technology – JPEG 2000 image coding system: Interactivity tools, APIs and protocols

### Summary

Rec. ITU-T T.808 | ISO/IEC 15444-9 provides a network protocol that allows for the interactive and progressive transmission of JPEG 2000 coded data and files from a server to a client. The first edition of this Recommendation | International Standard dates to 2005. It has since then been supplemented by amendments and corrigenda. Additionally, other members of the JPEG 2000 family of Recommendations | International Standards, that are capable of being used with the network protocol described in this Recommendation | International Standard have since been introduced. This second edition incorporates the changes associated with these developments, without modifying the original scope.

This Recommendation was developed jointly with ISO/IEC JTC 1/SC 29/WG 1 (JPEG), and is common text with ISO/IEC 15444-9.

This second edition cancels and replaces the first edition, which has been technically revised.

The main changes compared to the previous edition are as follows:

1. consolidates all outstanding amendments and corrigenda published since the first edition;
2. extends support for the file format specified in Rec. ITU-T T.815 | ISO/IEC 15444-16;
3. clarifies normative server responsibilities in response to certain request fields documented in Annex C;
4. removes the registration authority (Annex L); and
5. adds media type registration information (Annex O).

This Recommendation contains an electronic attachment that is available from the ITU website at: <https://handle.itu.int/11.1002/2000/7460>, and from the ISO website at: <https://standards.iso.org/iso-iec/15444/-9/ed-2/en>.

### History

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2.0	ITU-T T.808 (V2)	2022-12-14	16	<a href="https://handle.itu.int/11.1002/1000/15209">11.1002/1000/15209</a>

### Keywords

API, application programme interface, image coding, interactivity, JPEG 2000, protocols.

\* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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#### FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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1	Scope .....	1
2	Normative references.....	1
3	Definitions .....	2
	3.1 JPEG 2000 definitions.....	2
	3.2 HTTP definitions.....	2
	3.3 JPIP definitions .....	2
	3.4 Symbols.....	4
4	Abbreviations .....	6
5	Conventions.....	6
	5.1 ABNF rules .....	6
	5.2 File format ABNF rules.....	7
	5.3 Key to graphical descriptions of boxes (informative) .....	7
6	General description.....	8
	6.1 JPIP protocol.....	8
	6.2 Purpose.....	9
7	Conformance .....	10
Annex A – The JPP-stream and JPT-stream media types .....		11
	A.1 Introduction.....	11
	A.2 Message header structure .....	12
	A.3 Data-bins .....	14
	A.4 Conventions for parsing and delivery of JPP-streams and JPT-streams .....	22
	A.5 Conventions for JPP-stream or JPT-stream interoperability (informative) .....	22
Annex B – Sessions, channels, cache model and model-sets .....		23
	B.1 Requests within a session vs. stateless requests .....	23
	B.2 Channels and sessions .....	23
	B.3 Cache model management .....	24
	B.4 Interrogation and manipulation of model-sets.....	24
Annex C – Client request.....		25
	C.1 Request syntax .....	25
	C.2 Target identification fields .....	26
	C.3 Fields for working with sessions and channels .....	28
	C.4 View-window request fields.....	29
	C.5 Metadata request fields.....	42
	C.6 Data limiting request fields .....	48
	C.7 Server control request fields.....	48
	C.8 Cache management request fields .....	52
	C.9 Upload request parameters .....	57
	C.10 Client capability and preference request fields.....	57
Annex D – Server response signalling.....		65
	D.1 Reply syntax.....	65
	D.2 JPIP response headers .....	67
	D.3 Response data.....	72
Annex E – Uploading images to the server .....		73
	E.1 Introduction .....	73
	E.2 Upload request .....	73
	E.3 Server response .....	73
	E.4 Merging data on the server.....	74
Annex F – Using JPIP over HTTP.....		76
	F.1 Introduction .....	76
	F.2 Requests .....	76
	F.3 Session establishment.....	77

This is a preview of "ISO/IEC 15444-9:2023". [Click here to purchase the full version from the ANSI store.](#)

F.6	HTTP and length request field (informative) .....	79
Annex G	– Using JPIP with HTTP requests and TCP returns .....	80
G.1	Introduction .....	80
G.2	Client requests .....	80
G.3	Session establishment .....	80
G.4	Server responses .....	81
G.5	TCP and length request field (informative) .....	81
Annex H	– Using JPIP with alternate transports .....	82
H.1	Introduction .....	82
H.2	Reliable requests with unreliable data .....	82
H.3	Unreliable requests with unreliable data .....	83
H.4	Request and response syntax .....	83
H.5	Session establishment .....	84
Annex I	– Indexing JPEG 2000 files for JPIP .....	85
I.1	Introduction (informative) .....	85
I.2	Identifying the use of JPIP index boxes in the JPEG 2000 file format compatibility list .....	86
I.3	Defined boxes .....	86
I.4	Association of codestream indexes with codestreams .....	94
I.5	Placement restrictions (informative) .....	94
Annex J	– Profiles and variants for interoperability and testing .....	95
J.1	Introduction .....	95
J.2	Definition of variants .....	95
J.3	Definition of profiles .....	96
J.4	Testing methodology .....	98
Annex K	– Using JPIP with HTTP requests and UDP returns .....	103
K.1	Introduction .....	103
K.2	Client requests .....	103
K.3	Response data delivery and channel establishment .....	103
K.4	Server responses .....	104
K.5	Framing of response data into chunks .....	104
K.6	Client acknowledgement of server responses .....	105
K.7	UDP and Maximum Response Length Field (informative) .....	106
K.8	Implementation strategies for acknowledged communication (informative) .....	106
K.9	Implementation strategies for unacknowledged communication (informative) .....	106
Annex L	– Registration of extensions .....	108
Annex M	– Application examples .....	109
M.1	Introduction .....	109
M.2	Use of JPIP with codestreams in other file formats .....	109
M.3	Tile-part implementation techniques .....	109
M.4	Precinct-based implementation techniques .....	110
M.5	JPIP protocol transcripts .....	111
M.6	Using JPIP with HTML .....	114
Annex N	– JPIP ABNF collection .....	115
N.1	JPIP Request ABNF .....	115
N.2	JPIP Response BNF .....	122
Annex O	– Media type specifications and registrations .....	126
O.1	General .....	126
O.2	JPP-stream .....	126
O.3	JPT-stream .....	127
Bibliography	.....	128



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Figure 1 – Example of the box description figures .....	8
Figure 2 – Example of the superbox description figures .....	8
Figure 3 – JPIP protocol overview .....	8
Figure 4 – JPIP protocol stack .....	9
Figure A.1 – Examples of a JPEG 2000 file, JPIP data-bins and JPIP-stream relationships (after G.J. Colyer and R.A. Clark, IEEE Trans. Consumer Electronics, 49 (2003), pp. 850–854) .....	11
Figure A.2 – VBAS structure .....	12
Figure A.3 – Bin-ID VBAS structure .....	12
Figure A.4 – Example precinct data-bin .....	15
Figure A.5 – Metadata-bin example colour scheme .....	16
Figure A.6 – A sample JP2 file .....	17
Figure A.7 – A sample JP2 file divided into three metadata-bins .....	17
Figure A.8 – A superbox with a referenced metadata-bin .....	18
Figure A.9 – An invalid division of the file into metadata-bins .....	18
Figure A.10 – Example of the use of stream equivalents .....	19
Figure A.11 – Placeholder box structure .....	20
Figure C.1 – Desired region within an image .....	30
Figure C.2 – Desired region with respect to the subsampled reference grid .....	30
Figure C.3 – Colourspace specification box selection procedure .....	61
Figure G.1 – Response data structure on http-tcp connection .....	81
Figure I.1 – Part of an example JPEG 2000 file containing JPIP index boxes .....	86
Figure I.2 – Organization of the contents of a Codestream Index box .....	87
Figure I.3 – Organization of the contents of a Codestream Finder box .....	88
Figure I.4 – Organization of the contents of a Manifest box .....	88
Figure I.5 – Organization of the contents of a Fragment Array Index box .....	89
Figure I.6 – Organization of the contents of a Header Index Table box .....	90
Figure I.7 – Organization of the contents of a Tile-part Index Table box .....	91
Figure I.8 – Organization of the contents of a Tile Header Index Table box .....	91
Figure I.9 – Organization of the contents of a Precinct Packet Index Table box .....	91
Figure I.10 – Organization of the contents of a Packet Header Index Table box .....	92
Figure I.11 – Organization of the contents of a File Index box .....	92
Figure I.12 – Organization of the contents of a File Finder box .....	93
Figure I.13 – Organization of the contents of a Proxy box .....	93
Figure I.14 – Organization of the contents of an Index Finder box .....	94
Figure K.1 – Response data structure on http-udp connection .....	104

This is a preview of "ISO/IEC 15444-9:2023". [Click here to purchase the full version from the ANSI store.](#)

Table A.1 – Bin-ID additional VBAS indication.....	13
Table A.2 – Class identifiers for different data-bin message classes.....	13
Table A.3 – Valid values for the Flags field of a Placeholder box .....	21
Table C.1 – Round direction options .....	33
Table C.2 – Metadata request qualifier flags .....	47
Table C.3 – Alignment boundaries based on bin type .....	49
Table C.4 – Valid image return types .....	49
Table C.5 – Cache descriptor option summary.....	55
Table C.6 – Valid capabilities of the <code>processing-capabilities</code> element .....	58
Table C.7 – Valid values of the <code>config-capability</code> parameter.....	58
Table C.8 – View-window handling preferences.....	60
Table C.9 – Colourspace method client preferences.....	60
Table C.10 – Placeholder preferences .....	62
Table C.11 – Codestream sequencing preferences .....	63
Table C.12 – Conciseness preferences.....	63
Table D.1 – Valid values of <code>transport-param</code> .....	67
Table D.2 – Defined reason codes .....	72
Table D.3 – Additional <code>handled-req-option</code> values for particular request fields .....	72
Table I.1 – Defined boxes (Informative) .....	87
Table I.2 – Container type values .....	88
Table I.3 – Version values .....	90
Table J.1 – Defining requirements of variants.....	96
Table J.2 – Set of fields included in each profile.....	97
Table K.1 – Interpretation of the "control" field in each data chunk header.....	105
Table M.1 – Example of the use of auxiliary fields in a simple case.....	110
Table M.2 – Example of the use of auxiliary fields in a more complicated case.....	110

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allows great flexibility, not only for the compression of images but also for access into the codestream. The codestream provides a number of mechanisms for locating and extracting portions of the compressed image data for the purpose of retransmission, storage, display, or editing. This access allows storage and retrieval of compressed image data appropriate for a given application without decoding.

The purpose of this Recommendation | International Standard is to provide a network protocol that allows for the interactive and progressive transmission of JPEG 2000 coded data and files from a server to a client. This protocol allows a client to request only the portions of an image (by region, quality or resolution level) that are applicable to the client's needs. The protocol also allows the client to access metadata or other content from the file.

The substantive updates in this edition, compared to Edition 1, are:

1. consolidates all outstanding amendments and corrigenda published since the first edition;
2. extends support the file format specified in Rec. ITU-T T.815 | ISO/IEC 15444-16;
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