

1	Status	Final Text
2	Date of Last Update	2020/01/16
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7	Submission Date	2018/11/08

8	Correction Number CP-1920	
9	Log Summary: Padding in DICOM JSON and XML (Native) Models	
10	Name of Standard	
11	PS3.18, PS3.19	
12	Rationale for Correction:	
13	JSON and XML representations do not require padding of value fields to an even length. Clarify this in PS3.18 and PS3.19 and make	
14	text consistent.	
15	Correction Wording:	

Amend DICOM PS3.18 as follows (changes to existing text are bold and underlined for additions and ~~struckthrough~~ for removals):

F.1 Introduction to JavaScript Object Notation (JSON)

JSON is a text-based open standard, derived from JavaScript, for representing data structures and associated arrays. It is language-independent, and primarily used for serializing and transmitting lightweight structured data over a network connection. It is described in detail by the Internet Engineering Task Force (IETF) in ???, available at <http://www.ietf.org/rfc/rfc4627.txt>.

The DICOM JSON Model complements the XML-based Native DICOM Model, by providing a lightweight representation of data returned by DICOM web services. While this representation can be used to encode any type of DICOM Data Set it is expected to be used by client applications, especially mobile clients, such as described in the QIDO-RS use cases (see ???).

With the exception of padding to even byte length, a data source that is creating a new instance of a DICOM JSON Model shall follow the DICOM encoding rules in creating Values for the DICOM Attributes within the instance of the DICOM JSON Model. Attribute Values encoded in a DICOM JSON Model are not required to be padded to an even byte length.

A data recipient that converts data from an instance of the DICOM JSON Model back into a binary encoded DICOM object shall adjust the padding to an even byte length as necessary to meet the encoding rules specified in DICOM PS3.5.

Amend DICOM PS3.19 as follows (changes to existing text are bold and underlined for additions and ~~struckthrough~~ for removals):

A.1.1 Usage

The Native DICOM Model defines a representation of binary-encoded DICOM SOP Instances as XML Infosets that allows a recipient of data to navigate through a binary DICOM data set using XML-based tools instead of relying on tool kits that understand the binary encoding of DICOM.

Note

It is not the intention that this form be utilized as the basis for other uses. This form does not take advantage of the self-validation features that could be possible with a pure XML representation of the data.

With the exception of padding **to an even byte length**, a data source that is creating a new instance of a Native DICOM Model (e.g., the result from some analysis application) shall follow the DICOM encoding rules (e.g., the handling of character sets) in creating Values for the DicomAttributes within the instance of the Native DICOM Model. **Attribute Values encoded in a Native DICOM Model are not required to be padded to an even byte length.**

Group Length (gggg,0000) attributes shall not be included in a Native DICOM Model instance.

A data recipient that converts data from an instance of the Native DICOM Model back into a binary encoded DICOM object shall adjust the padding **to an even byte length** as necessary to meet the encoding rules specified in DICOM PS3.5.