

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2015/01/06
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Correction Number	CP-1429
Log Summary: Tiled Image Box in Structured Display	
Name of Standard PS 3.3 2015a	
<p>Rationale for Correction</p> <p>Add TILED format for Image Box in Structured Display, to support display behavior typical of PACS workstations. This capability is included in the Hanging Protocol specification.</p> <p>Note that the addition of this capability does not affect conformance requirements for existing implementations; PS3.4 B.5.1.9 allows a Structured Display SCP / display app to selectively choose the formats it supports:</p> <p style="padding-left: 40px;">An SCP of the Basic Structured Display Storage SOP Class that is capable of rendering SOP Instances of the Class shall identify in its Conformance Statement the Composite Storage SOP Classes and Softcopy Presentation State Storage SOP Classes that are also supported by the SCP, and will be rendered when referenced by Basic Structured Display SOP Instances for display. It shall specify in its Conformance Statement the user display controls and interactions for the values of Image Box Layout Type (0072,0304) and Type of Synchronization (0072,0434) that it supports. It shall identify in its Conformance Statement its behavior when encountering a referenced Presentation State or other Composite Storage SOP Instance whose display it does not support, or an unsupported value of Image Box Layout Type or Type of Synchronization; such behavior shall include at a minimum a display to the user of the nature of the incompatibility.</p>	
Correction Wording:	

Table C.11.17-1. Structured Display Image Box Attributes

Attribute Name	Tag	Type	Attribute Description
Structured Display Image Box Sequence	(0072,0422)	1	The image display boxes defined in the display environment, together with the reference to the image to be displayed in each Image Box. One or more Items shall be included in this sequence.
>Display Environment Spatial Position	(0072,0108)	1	Exactly four dimensionless floating point values, in the range 0.0 to 1.0, indicating the rectangular coordinate position of the Image Box within the Display Environment. Note For the Basic Structured Display with a single screen, the Display Environment is coextensive with the screen defined in the Nominal Screen Definition Sequence (0072,0102).

Attribute Name	Tag	Type	Attribute Description
			See Section C.11.17.1.1
>Image Box Number	(0072,0302)	1	An integer that is unique across all Items of the Structured Display Image Box Sequence (0072,0422) that identifies the Image Box.
>Image Box Layout Type	(0072,0304)	1	<p>Type of layout of the Image Box. The types are primarily distinguished by their interaction technique.</p> <p>Defined Terms:</p> <p>TILED a scrollable array of rectangles, each containing a single frame of image pixel data.</p> <p>STACK a single rectangle containing a steppable single frame, intended for user-controlled stepping through the image set, usually via continuous device interaction (e.g., mouse scrolling) or by single stepping (mouse or button click).</p> <p>CINE a single rectangle, intended for video type play back where the user controls are play sequence, rate of play, and direction.</p> <p>SINGLE a single rectangle, intended for images and objects with no defined methods of interaction.</p> <p>Note</p> <p>This value may also be used for non-image objects, such as waveforms and SR documents.</p>
>>Image Box Tile Horizontal Dimension	(0072,0306)	1C	<p>Positive integer defining the horizontal Image Box tile dimension; the number of columns.</p> <p>Required if the value of Image Box Layout Type (0072,0304) is TILED.</p>
>>Image Box Tile Vertical Dimension	(0072,0308)	1C	<p>Positive integer defining the vertical Image Box tile dimension; the number of rows.</p> <p>Required if the value of Image Box Layout Type (0072,0304) is TILED.</p>
>Image Box Overlap Priority	(0072,0320)	3	If this Image Box overlaps in spatial position with others, this attribute indicates the layer of this Image Box in relation to the others. The value shall be a positive integer in the range 1 to 100, where 1 = top and 100 = bottom. If this attribute is not present, then the expected behavior is not defined.
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