

DICOM Correction Item

Correction Number		CP-233
Log Summary: Clarify SR closed polyline start and end points		
Type of Modification	Name of Standard	
Clarification	PS 3.3 2000	
<p>Rationale for Correction</p> <p>There is a slight divergence between graphic data types in SR (Sup 23) and Presentation State (Sup 33). In addition, there is an aspect of the POLYLINE graphic type that is unspecified.</p> <p>In SR, a POLYLINE is defined to be “a closed polygon with vertices denoted by (column,row) pairs” without further detail about the vertices.</p> <p>In Presentation State a POLYLINE is defined to be “an n-tuple list of end points between which straight lines are to be drawn”. There is no notion of “open” or “closed”, except that whether or not the POLYLINE is filled in is specified by an additional attribute (not used in SR) that is required for a POLYLINE if “the first data point is the same as the last data point”.</p> <p>In otherwords, to display a “filled in” or “outline” rectangle in a presentation state requires five points, not four, the first point being the same as the last.</p> <p>In SR, the question arises as to whether or not a rectangle is “explicitly closed” and represented by five points, or “implicitly closed” and represented by four points. The latter would be feasible, since for SR a POLYLINE is defined to be always closed, but the former would be consistent with Presentation State (very desirable).</p> <p>Accordingly, this clarification proposes that in SR the start and end points be required to be the same to be a closed polygon. Otherwise the points represent a series of line segments.</p>		
Sections of documents affected		
PS 3.3 C.18.6.1.2		
Correction Wording:		

C.18.6.1.2 Graphic Type

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POLYLINE = a ~~closed polygon~~ **series of connected line segments** with **ordered** vertices denoted by (column,row) pairs; **if the first and last vertices are the same it is a closed polygon**