

DICOM Correction Item

Correction Number	CP-827
Log Summary: Level 2 Storage SCP may discard empty Type 3 attributes	
Type of Modification	Name of Standard
Clarification	PS 3.4 2008
Rationale for Correction	
PS 3.5 defines empty Type 3 and absent Type 3 data elements to have the same meaning. The question arises as to whether or not a Level 2 SCP may "discard" empty Type 3 data elements and not return them. It would seem to be desirable to allow this behavior.	
Sections of documents affected	
PS 3.4 B.4.1	
Correction Wording:	

PS 3.4: Amend section B.4.1:

B.4.1 Conformance as an SCP

Three levels of conformance to the Storage SOP Classes as an SCP may be provided:

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- Level 2 (Full). Level 2 conformance indicates that all Type 1, Type 2, and Type 3 Attributes defined in the Information Object Definition associated with the SOP Class, as well as any Standard Extended attributes (including Private Attributes) included in the SOP Instance, will be stored and may be accessed. The SCP may, but is not required to validate that the Attributes of the SOP Instance meet the requirements of the IOD.

Note: A Level 2 SCP may discard (not store) Type 3 attributes that are empty (zero length and no Value), since the meaning of an empty Type 3 attribute is the same as absence of the attribute. See PS 3.5 definition of "Type 3 Optional Data Elements".

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Three levels of Digital Signature support are defined for an SCP which claims conformance to Level 2 (Full) storage support:

- Signature Level 1. SCP may not preserve Digital Signatures and does not replace them.
- Signature Level 2. SCP does not preserve the integrity of incoming Digital Signatures, but does validate the signatures of SOP Instances being stored, takes implementation-specific measures for insuring the integrity of data stored, and will add replacement Digital Signatures before sending SOP Instances elsewhere.
- Signature Level 3. SCP does preserve the integrity of incoming Digital Signatures (i.e. is bit-preserving and stores and retrieves all Attributes regardless of whether they are defined in the IOD).

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PS 3.5: For reference, unchanged section 7.4.5:

7.4.5 TYPE 3 OPTIONAL DATA ELEMENTS

IODs and SOP Classes define Type 3 Data Elements that are optional Data Elements. Absence of a Type 3 element from a Data Set does not convey any significance and is not a protocol violation. Type 3 elements may also be encoded with zero length and no Value. The meaning of a zero length Type 3 Data Element shall be precisely the same as that element being absent from the Data Set.