DICOM Correction Proposal

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<td>2015/04/30</td>
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Correction Number        CP-1451

Log Summary: Remove retired Point Index List attributes in PS3.5 Annex A

Name of Standard
DICOM PS3.5

Rationale for Correction:
CP1365 introduces new 32-bit (UL VR) Index List Attributes in the Surface Mesh Primitives Macro, replacing the previous 16-bit index attributes, which were retired.
The description of the encoding of these retired attributes was not updated in PS3.5 Annex A.
This CP
- removes the requirements for encoding the 16-bit OW Index List attributes
- adds a note is added to document previous existence and encoding rules of the retired attributes
- adds an explanation for the retirement of the 16-bit index values

Correction Wording:

Correct DICOM PS3.5 Annex A.1, remove last bullet point before last note and add new note

A.1 DICOM Implicit VR Little Endian Transfer Syntax

.....

- Data Elements (0066,0025) Vertex Point Index List, (0066,0024) Edge Point Index List, (0066,0023) Triangle Point Index List and (0066,0029) Primitive Point Index List have the Value Representation OW and shall be encoded in Little Endian and are always interpreted as unsigned.

Note

1. Encoding of Curve Data and Audio Sample Data was previously defined but has been retired. See PS3.5-2004.

2. Vertex Point Index List (0066,0025), Edge Point Index List (0066,0024), Triangle Point Index List (0066,0023) and Primitive Point Index List (0066,0029) were previously defined with a value representation of OW and always interpreted as unsigned, but have been retired.
These have been replaced by corresponding UL data elements, which allow values larger than 65535 to index the full range of points that can be encoded in Point Coordinates Data (0066,0016). See PS3.5-XXXX.

This DICOM Implicit VR Little Endian Transfer Syntax shall be identified by a UID of Value "1.2.840.10008.1.2".

**Correct DICOM PS3.5 Annex A.2, remove last bullet point before last note and add new note**

**A.2 DICOM Little Endian Transfer Syntax (Explicit VR)**

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- Data Elements (0066,0025) Vertex Point Index List, (0066,0024) Edge Point Index List, (0066,0023) Triangle Point Index List and (0066,0029) Primitive Point Index List have the Value Representation OW and shall be encoded in Little Endian and are always interpreted as unsigned.

Note

1. For Data encoded with the Value Representation OB, the Data encoding is unaffected by Little Endian or Big Endian byte ordering.

2. Encoding of Curve Data and Audio Sample Data was previously defined but has been retired. See PS3.5-2004.

3. Vertex Point Index List (0066,0025), Edge Point Index List (0066,0024), Triangle Point Index List (0066,0023) and Primitive Point Index List (0066,0029) were previously defined with a value representation of OW and always interpreted as unsigned, but have been retired. These have been replaced by corresponding UL data elements, which allow values larger than 65535 to index the full range of points that can be encoded in Point Coordinates Data (0066,0016). See PS3.5-XXXX.

This DICOM Explicit VR Little Endian Transfer Syntax shall be identified by a UID of Value "1.2.840.10008.1.2.1".

**Correct DICOM PS3.5 Annex A.3, remove last bullet point before last note and add new note**

**A.3 DICOM Big Endian Transfer Syntax (Explicit VR)**

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- Data Elements (0066,0025) Vertex Point Index List, (0066,0024) Edge Point Index List, (0066,0023) Triangle Point Index List and (0066,0029) Primitive Point Index List have the Value Representation OW and shall be encoded in Little Endian and are always interpreted as unsigned.

Note

1. For Data encoded with the Value Representation OB, the Data encoding is unaffected by Little Endian or Big Endian byte ordering.
2. Encoding of Curve Data and Audio Sample Data was previously defined but has been retired. See PS3.5-2004.

3. Vertex Point Index List (0066,0025), Edge Point Index List (0066,0024), Triangle Point Index List (0066,0023) and Primitive Point Index List (0066,0029) were previously defined with a value representation of OW and always interpreted as unsigned, but have been retired. These have been replaced by corresponding UL data elements, which allow values larger than 65535 to index the full range of points that can be encoded in Point Coordinates Data (0066,0016). See PS3.5-XXXX.

This DICOM Explicit VR Big Endian Transfer Syntax shall be identified by a UID of Value "1.2.840.10008.1.2.2".

Correct DICOM PS3.5 Annex A.4, remove last bullet point before last note and add new note

A.4 Transfer Syntaxes For Encapsulation of Encoded Pixel Data

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- Data Elements (0066,0025) Vertex Point Index List, (0066,0024) Edge Point Index List, (0066,0023) Triangle Point Index List and (0066,0029) Primitive Point Index List have the Value Representation OW and shall be encoded in Little Endian and are always interpreted as unsigned.

Note

1. For Data encoded with the Value Representation OB, the Data encoding is unaffected by Little Endian or Big Endian byte ordering.

2. Encoding of Curve Data and Audio Sample Data was previously defined but has been retired. See PS3.5-2004.

3. Vertex Point Index List (0066,0025), Edge Point Index List (0066,0024), Triangle Point Index List (0066,0023) and Primitive Point Index List (0066,0029) were previously defined with a value representation of OW and always interpreted as unsigned, but have been retired. These have been replaced by corresponding UL data elements, which allow values larger than 65535 to index the full range of points that can be encoded in Point Coordinates Data (0066,0016). See PS3.5-XXXX.

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