DICOM Correction Item

Correction Number: CP-1082
Log Summary: Add term for IEEE 1588 Precision Time Protocol

Type of Modification | Name of Standard
--- | ---
Addition | PS 3.3-2009

Rationale for Correction:

From Wikipedia:
The Precision Time Protocol (PTP) is a high precision time synchronization protocol for networked measurement and control systems. Accuracy in the sub-microsecond range may be achieved with low-cost implementations.[1] It is defined in the IEEE 1588-2002 and 1588-2008 standards, officially entitled "Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems".

"IEEE 1588 is designed to fill a niche not well served by either of the two dominant protocols, NTP and GPS. IEEE 1588 is designed for local systems requiring very high accuracies beyond those attainable using NTP. It is also designed for applications that cannot bear the cost of a GPS receiver at each node, or for which GPS signals are inaccessible."[2]

Sections of documents affected
PS 3.3 Annex C.7.4.2

Correction Wording:

Add a reference to section 2, Normative References


Modify table C.7-7

Table C.7-7
Synchronization Module Attributes

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Tag</th>
<th>Type</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTP Source Address</td>
<td>(0018,1803)</td>
<td>3</td>
<td>IP Address of NTP, <strong>SNTP, or PTP</strong> time source. IPv4 addresses shall be in dotted decimal (e.g. 192.168.1.1). The IPv6 addresses shall be in colon</td>
</tr>
</tbody>
</table>
| | separated hexadecimal (e.g. 12:34:56:78:9a:bc:de:f0).
| Note: | Identity of this value in two instances acquired contemporaneously implies a common time base. The NTP Source Address *may/might* not persist over time. |