

Supplement 183

PS3.18 WEB SERVICES RE-DOCUMENTATION

DICOM WORKING GROUP 27 WEB TECHNOLOGIES

LETTER BALLOT

JIM PHILBIN

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Problem statement

- Part 18 was introduced in 2005 to house what is now called the WADO-URI service. Since that time 5 supplements have been added to Part 18 and another supplement is pending.
- The new supplements have needed to address details and adopt web-oriented specification conventions.
- There are aspects of the structure of the original Part 18 that are not ideally suited to the new services. This has resulted in inconsistencies in terminology and document format across the old and new services.
- In addition, W3C is about to introduce a Revised HTTP/1.1 standard (expected by December 2013), which is a re-documentation of RFC 2616 Hypertext Transfer Protocol – HTTP/1.1, that incorporates the content of several other RFCs and cleans up terminology inconsistencies. Part 18 is inconsistent in its use of HTTP/1.1 terminology and the re-documentation would harmonize it with this underlying standard.

General Goals

- DICOM has a strong interest in engaging a new generation of web-oriented developers for DICOMweb.
- As a result the DICOM committee decided that it would be advantageous to make the effort to reorganize Part 18 to be more accessible and easier to navigate and understand.
- The most important aspect of the re-documentation is that technical requirements of PS3.18 should not be changed. Errors, ambiguities, and underspecified aspects of the current PS3.18 have been corrected through the CP process prior to the finalization of this supplement.

Specific Goals

- Factor out text that is common to multiple services and in doing so 1) ensure uniformity and 2) make clearer and concise for readers.
- Use a uniform format and style for documenting DICOM web services, making it easier to navigate and more efficient for readers implementing multiple services
- Bring the Standard into conformance with current Web Standards, especially [RFC7230 – 7234], and [RFC3986 – 3987].
- Use the Augmented Backus-Naur Form (ABNF) defined in [RFC5234] and [RFC7405] to specify the syntax of request and response messages.

Specific Goals (continued)

- Use consistent terminology throughout the Standard.
- Use a consistent format for documenting services and transactions.