

DICOM Correction Proposal

STATUS	Assigned
Date of Last Update	2025/05/20
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Correction Number	CP-2254
Log Summary: Clarify relative URI usage in DICOMweb	
Name of Standard	
PS 3.18 DICOMweb	
Rationale for Correction:	
<p>The existing standard neither explicitly allows or disallows relative URIs, but references a standard that specifically allows relative URI's to be used (RFC 3986 – specific text is "...and a process for resolving URI references that might be in relative form")</p> <p>Given the referenced standard and the fact that relative URI's were not disallowed in the original standard, the expectation is that relative URI's are permitted. There is a single reference in the standard stating the URI's are http(s) ones, but relative URI's are still http(s) if the base URI is of that form, which it would be for anything retrieved from DICOMweb services.</p> <p>RFC-3986 then goes on to define four types of relative URI's, of which two are of interest: absolute path and relative path URI's.</p>	
Correction Wording:	

Section 10.4.1.1.5 shown only for context

10.4.1.1.5 Bulkdata Resources

Bulkdata resources (defined in Table 10.4.1.5-1) are used to retrieve data elements (typically containing large data, such as Pixel Data) extracted from DICOM Instances.

Table 10.4.1.5-1. Retrieve Transaction Bulkdata Resources

Resource	URI Template
Study Bulkdata	/studies/{study}/bulkdata
Series Bulkdata	/studies/{study}/series/{series}/bulkdata
Instance Bulkdata	/studies/{study}/series/{series}/instances/{instance}/bulkdata
Bulkdata	{bulkdataURI}

Add 10.4.1.1.5.1 after the section shown below:

10.4.1.1.5.1 Bulkdata URI

The Bulkdata URI is a URI (see RFC 3986) which can be used to retrieve the Bulkdata for a single tag.

Since the Bulkdata URI is a URI, it can be either absolute or relative. The relative URI has three forms: scheme relative, path absolute or path relative. The scheme relative would require a custom scheme root path defined in the standard, but this would not be backwards compatible with DICOMweb and is thus not used.

The absolute path URI is defined relative to the same server and protocol as the root retrieve. For example:

- `/dicomweb/studies/{study}/bulkdata/00100010`
- `/dicomweb/studies/{study}/series/{series}/instances/{instance}/frames`

The relative path URI's are relative to the metadata request used to retrieve the metadata containing the Bulkdata URI. Some examples:

- Bulkdata/00100010
- series/{series}/instances/{instance}

Which resolve to different paths depending on the metadata path. Assuming '<https://hospital.com/dicomweb/studies/1.2.3>/metadata' as the path, that would result to:

- <https://hospital.com/dicomweb/studies/1.2.3/Bulkdata/00100010>
- <https://hospital.com/dicomweb/studies/1.2.3/series/{series}/instances/{instance}>

Note: This means the relative path URI's will differ between retrieving the metadata at the study, series or instance levels as the base path for that metadata is different.