

DICOM Supplement

STATUS	Draft
Date of Last Update	2018/10/28
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Submission Date	2018/09/xx

Summary: DICOMWEB SUPPORT FOR RETRIEVE VIA APPLICATION/ZIP
Name of Standard PS3.18

<i>Open Questions</i>

Q	Question	Suggested Response
1	(Brad) Do we want to include support for DICOMDIR structures, or make it the default (or only) format?	No. Instead recommend ONLY DICOM Zip format.
2	(Joel) Would we consider supporting the DICOM media type already defined in Part 12 section V?	Yes, that sounds reasonable (need to check on viability). See http://dicom.nema.org/medical/dicom/current/output/html/part12.html#chapter_V
3a	(Brad) Do we want to have parameters to support anonymization?	Yes, this is already supported at http://dicom.nema.org/medical/dicom/current/output/html/part18.html#sect_8.1.7 – leverage this and no more.
3b	(Brad) Do we want to have parameters to support ZIP encryption?	Could be useful: Needs to be further studied. AES / secret key that client supplies. Perhaps not consider this: Other measures are in place for encryption “at transfer”. Client can apply the password at their end. Maybe too many problems. Explore the use case. Does convenience trump the potential problems?
4	(Brad) Do we need to specify any details regarding the transfer syntax / media types of the contained files?	Yes, but use the same structure as what multipart/related supports.
5	(David) Do we want to specify a different RESTful resource (e.g., /packaged)	No, that shouldn’t be necessary; it’s essentially a transformation on the same path as other WADO-RS services. /packaged might be an alternate approach (as opposed to using an accept header). Maybe include both as an alternative? Probably not.
6	(David) Do we want to allow support for tar or rar, be silent	Be silent on it (if an implementation

	on it, or explicitly disallow it?	chooses to add additional formats, sure). Issue for public comment – disallow it? Looking for the broadest applicability of usage.
7	(Brad) Is “zip” a “DICOM media type”, a rendered media type, or something else?	It is a DICOM media type defined in Part 12 Section V – see Q2
8	(Joel) Can we support retrievals that are completely specified in a URL (and not require Accept header to be passed)?	This is already supported in PS3.18 6.1.1.5 (query parameter “accept”). http://dicom.nema.org/medical/dicom/current/output/html/part18.html#sect_6.1.1.5
9	(Charles) The “README” of the file that indicates “where it came from” and other metadata – extremely important.	
10	(Elliot) Are there conceivable limits to the ZIP file size itself? What about DICOMDIR limits? Limit of the # of items in the root directory?	The problem would apply to any implementation of DICOM Zip – solutions would apply beyond web. We may need to consider “a web user downloading a PB file”.
11	(Rob) Need to check the reference to ZIP as a standard – it may need to be updated. E.g., https://support.pkware.com/display/PKZIP/APPNOTE and are there any ZIP extensions that we would also need to consider?	
12	(Rob) Do we have any concerns about popping a URL into Chrome for example? Just need to think through if there are any concerns. What if someone tries to download but not authenticated – does this need any special behavior? What if someone asks for jpg?	
13	(Elliot) We need to specify which the server should “prefer” if multipart/related and application/zip are “weighted” equally.	

Closed Questions

Q	Question	Notes

Insert new PS3.18 section 8.7.3.3 as follows

8.7.3.3 DICOM Zip Media Types

Table 8.7.3.-7 specifies the media types that may be used to encode representations of Zip for the URI and RESTful services. Only the RESTful Services support Zip representations.

8.7.3-7. Media Types for Zip

Media Type	Descriptions	URI	RESTful
application/zip	Encapsulates all composite SOP Instances in the referenced study or series as a Zip file.	not applicable	required

A DICOM Zip shall use the structure defined in PS3.12 Section V.