

MINUTES

MEETING NAME 09-WG33: WG-33 Data Archive and Management

MEETING PLACE/DIAL IN

DATE & TIME Wednesday, January 5, 2022 | 11:00 am – 12:30 pm US ET

PRESIDING OFFICERS Matthew Bishop, UnityPoint Health
 Keith Eklund, Healthcare Tech Solutions

VOTING MEMBERS PRESENT

Ambra Health	Ostrow, Daniel
Argentix Informatics, Inc.	Silver, Elliot
DesAcc EMEA	Lyshkow, Hugh
GE Healthcare	Nichols, Steven
GE Healthcare	Numan, Jouke
Grafimedia	Georgiadis, Pantelis
Healthcare Tech Solutions	Eklund, Keith
Laitek, Inc.	Costea-Barluti, Razvan
Laitek, Inc.	Solomon, Harry
Society for Imaging Informatics In Medicine	Bishop, Matthew
Society for Imaging Informatics In Medicine	Carey, Cheryl

OTHERS

Laitek, Inc.	Behlen, Fred
Mega Informatica Ltd	Fauquex, Jacques

VOTING MEMBERS ABSENT

AAPM	Bevins, Nicholas
ACR	Maldonado, Josh
Canon Medical Research USA	O'Donnell, Kevin
Change Healthcare	Ho, Kinson
European Society of	Mildenberger, Peter

Radiology	
Mayo Clinic Rochester	Persons, Kenneth
PixelMed Publishing	Clunie, David
Society for Imaging Informatics	Henson, Kyle
In Medicine	
Varian Medical Systems, Inc.	Schwere, Thomas
Varian, a Siemens Healthineers	Anghelescu, Alex
Company	

DICOM Anna Zawacki, SIIM
SECRETARIAT

1 CALL TO ORDER AND REVIEW OF ANTI-TRUST RULES AND DICOM PATENT POLICY (Co-Chairs, Secretariat)

The meeting was called to order. Guidelines for Conducting NEMA Meetings were read and attendance was recorded.

2 REVIEW AND APPROVE AGENDA (Co-Chairs)

The agenda was reviewed and approved.

3 REVIEW MINUTES (Co-Chairs)

The minutes of the previous meeting were reviewed and approved.

4 TOPIC ITEMS TO BE DISCUSSED (All)

- Discuss any public comments that have come in so far for Sup# 223

Reviewed and discussed comments from GE sent by Jouke and Steve

PC2.1.A	Should we “raise the bar” for conformance to the new Repository Query? Current draft supports additional use cases unrelated to Inventory creation which might benefit from the capability to return more responses beyond the limitation that are imposed by implementations. Raising the bar could, depending on the additional requirements, result in lower number of implementations of the Repository Query.
PC2.1.B	What should be the behavior for matching unsupported optional keys? Standard mechanism in DICOM for behavior that is different from base is Extended Negotiation. As both the Repository Query defined behavior and limitations imposed by current implementations on regular queries already limit the number of responses, there seems to be no imperative need to deviate from existing mechanisms to require negotiation when non-base behavior is required.
PC2.1.C	What should be the query behavior for federated repositories with different sets of supported Attributes and matching mechanisms? If repository implementation supports federation, the Conformance Statement should define support/impact in Repository Query and Inventory IOD.
PC2.1.D	Is there a need for a Repository Query to be able to return all known Attributes? This simplifies implementing an SCU that creates an Inventory SOP instances from the output of Repository Query (see PS 3.17, XXXX.7.1 in the supplement) as it doesn't need to know which attributes (standard, optional or private) are present in the SCP being queried.
PC2.2.A	Is Inventory properly placed in the Non-Patient Object Service Class? Should a similar PHI note be added elsewhere? Consider adding a formal definition of non-patient object in the beginning of Part 4.
PC2.3.A	Are additional attributes needed for identifying characteristics of multiple versions of stored instances? Could the Alternate Representation Sequence be leveraged?
Figure XXXX.4-1 Inventory-related information definitions and services	Rename diagram to “Inventory IOD definitions and services” since the diagram does not include the repository query.

- Review edits to the Open Issue responses Harry has drafted for Sup# 223

Latest draft posted to the FTP: ftp://d9-workgrps@medical.nema.org/MEDICAL/Private/Dicom/WORKGRPS/WG33/2022/2022-01-05/Sup223_PC2%2B1_InventoryIODandServices.docx

Change from last discussion:

1. BLOB container type has been included, put in as a statement of conformance for federated applications, added Metadata Sequence in query
2. Added some titles in the Scope and Field of Application
3. Change Open to Closed Issues as we go to Letter Ballot

- First one – not raise the bar for conformance to the new Repository Query – in line with what we discussed at last mtng and GE’s comment.
- 2nd one – what should be the behavior for matching unsupported optional keys – comments agreed with current approach of keeping it aligned with other Query SOP Classes. Use of Extended Negotiation as a parameter remains an option.
- 3rd – what should be the query behavior for federated repositories with different sets of supported attributes and matching mechanisms? Requirements on conformance statement for federated applications added.
- 4th -is there a need for repository query to be able to return all known attributes? Optional metadata sequence added.
- 5th – is inventory properly placed in the non-patient object service class? Additional clarifying text added to Part 4 front matter.

At the last mtng we added in a Lossy Image Compression ratio and the BLOB container format

Since we added the BLOBS we had to change some of the conditions because BLOBS don’t have a filename.

File offset in container is required if it is a BLOB, same for File length in container

Went through all the edits in the document added after the last meeting and as a result of the comments.

Reviewed definition of the BLOB and approved.

MAC Algorithm – added in section for defined terms.

Updated metadata sequence -

<u>Metadata Sequence</u>	<u>(00gg.0Fz3)</u>	<u>O</u>	<u>All Attributes at the Query/Retrieve Level that are managed by the SCP. See Section C.6.x4.1.5</u> <u>Zero or one Item may be included in this Sequence in a Response Identifier.</u>
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- Still think we need an updated description here
- We cannot necessarily rely on the repository to accurately identify whether updates are required to the stored instances, like to go back to the minutes of that meeting
- The issue is – given the nature of how a lot of PACS store metadata in their database, it is not clear when the overwrite has happened or when it’s just a representation that’s exactly the same as what’s on disc

Reviewed text for the Metadata sequence -

1390 **C.6.x4.1.5 Metadata Sequence**

Metadata Sequence (00gg_0Fz3) contains all Attributes at the Query level that are managed by the SCP for rapid response to Query requests. Excluded are bulk data elements such as pixel, waveform, and surface mesh data.

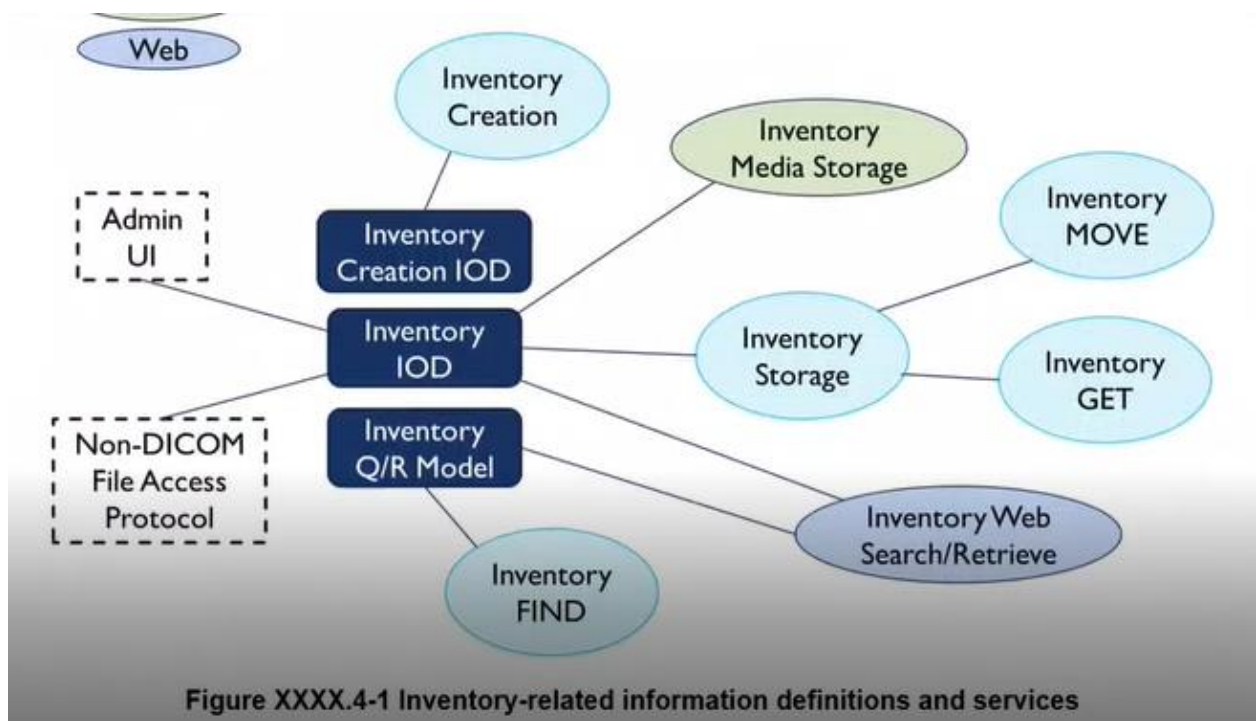
Note

1395

The set of Attributes returned is implementation dependent. The intention is that the SCP returns Attributes that it manages in a database, rather than reading a SOP Instance from secondary media and parsing out Attributes to be returned. In some implementations this would include only Attributes supported for Query Key matching, while in other implementations this might include all non-bulk data Attributes.

After discussion Agreed to leave as is for WG=06 to review and comment

Reviewed Part 17 and the below diagram



Picture and the title will need to be fixed


Added in examples of attributes that are used and all the use cases

Issue we still have is in part 17 explanatory information – no description of the complete metadata

Updated line 2095 to read Updated Metadata and Managed Metadata and updated text, added a paragraph

2095 **XXXX.2.3.3 Updated metadata and managed metadata**
Many repository applications do not update stored SOP Instances with changes to metadata that occur over time (e.g., patient name and ID). Therefore, applications that use non-DICOM direct file access need to obtain the current metadata, which can be retrieved in a query using the Updated Metadata Sequence (00gg,0Fz2) Key Attribute, defined by the Repository Query SOP Class (see [Section C.6.x4.1.4 "Updated Metadata Attributes" in PS3.4](#)). It is the responsibility of the using application to use the metadata in these returned Attributes (see [Section XXXX.7.9 "Metadata Updates"](#)).

2100

 To support some client use cases, especially in research, the SCP may support return of all metadata managed in its database in the Metadata Sequence (00gg,0Fz3).

Jouke and Harry to work on this together to refine the language.

4hrs on WG-06 agenda next week – Monday and Wednesday

WG-06 wants to do a line-by-line review to prepare for Letter Ballot

5 OLD BUSINESS

6 NEW BUSINESS

7 DATE AND TIME OF NEXT MEETINGS (Secretariat)

- Continue T-con meetings bi-weekly
- Next call is January 19, 2022 between 11:00 am and 12:30 pm ET – Jan 19 call has been cancelled due to travel, WG-33 will now meet next on 2/2

<u>NEMALINK CODE</u>	09-WG33
<u>SUBMITTED BY</u>	Hull, Carolyn
<u>SUBMITTED ON</u>	1/14/22
<u>LEGAL APPROVAL</u>	1/26/22
<u>UPLOAD LOCATION</u>	Enter upload location.