Digital Imaging and Communications in Medicine (DICOM)

Supplement 209: Revision of the DICOM Conformance Statement

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Table of Contents

Document History

2020/10/13	Version 0		Initial version
2021/03/15	Version 1		Version for Public Comment
2022/03/24	Version 2		Version for Letter Ballot

Open Issues

All open issues have been resolved

Closed Issues

1	In the Overview Section: How detailed must the table for the supported services really be. There are two types of users for the overview. The more technical users, who want to know some level of technical details, and the more clinically oriented users, who really want a high-level overview? How can we best accommodate these two different usage scenarios? The subgroup decided to move the detailed tables initially planned as Section 5.1 Summary of all supported Services into the overview. Is this approach ok? Answer: Approach was accepted by WG 31 and WG 6
2	Based on the results of the survey about 40% of the respondents were interested in seeing basic configuration information in the overview, is this necessary and if so, what is the information that is needed here? For now, we leave it out. Answer: There is no reasonable way to provide a configuration summary, the information in section 6 is already pretty high level and therefore we decided to keep it out of the overview.
3	In general, should sections for services not supported be removed from the document or should they be kept and marked with N/A. The advantage of keeping them would be that section numbering would be consistent across different vendors. The disadvantage would be, that depending on the amount of services supported, there may be many sections marked as N/A. Current instructions indicate to mark them as N/A Answer: In order to improve comparability between different product DCS documents and to keep consistent numbering, it was decided to mark sections for non supported services as N/A on the highest level, where it does apply, e.g if you do not support Web Services you can mark section 5.3 as N/A and delete all sub-sections.
4	Appendix A: Should IOD tables be part of an Appendix or the Storage subsection of Section 5? Answer: After discussion in WG 31 and WG 6 it was decided that readability is improved if the IOD tables are in an appendix. How are Web Services documented in the Summary subsection of Section 5 and/or throughout the document? Answer: After discussion with WG 6, Web Services have been integrated into the respective overview tables. Detailed descriptions for the capabilities and parameters, configuration and error handling have been added to the respective Sections
5	Section 7 and Section 8 are two different ways to present the Network Communication Details. Final decision about which approach will be used is still outstanding. Answer: Combined both approaches. See current Structure of Section 7. Section 8 will be added for Security
6	How to document Application specific capabilities or licensable features in general and in the overview the Summary subsection of Section 5? Answer: Provide footnotes under tables. If more details are needed, refer to an annex
7	How to represent the connection between AE and services Answer: During the WG31 meeting at the RSNA it was suggested to provide a table at the beginning of section 5 which provides a mapping between AEs and services
8	Should we represent all the details of sequencing (including Association details) in section 4 or should it be represented in Technical Details or Services Section. If we move it to more detailed section, do we keep a summary in section 4. Answer: It was decided to provide a high-level diagram showing the different components/services of the system in Section 4. Details flow diagrams would be provided in Section 7

9	Where should Status Codes be documented? The two options are • In the service definitions of Section 5 • As a subsection in the Section 7 on Network Communication Details. Current thinking is to bundle them altogether in Section 7. Answer: WG 6 also suggested to keep it in section 7
10	In Section 5.2, how granular do we need to provide these services. Do we need to list the exact SOP Classes (e.g all different Storage SOP Classes supported?) or the different query/retrieve models or is the service itself sufficient? Answer: For now, the decision is to keep it on the service level.
11	Section 6: Decide on which approach to use for configuration Answer: ALT 1 (sub section for each DICOM Service) – Decision made during WG31 meeting of sept 10th 2018
12	Section 1.3: The table here is for workflow management and therefore contains a variety of services e.g. Worklist related services, Storage Commitment, MPPS; UPS. Some of them have an equivalent in the Web Services world, some of them don't. As of now, the only one having this correlation is UPS, however there is no distinction between different SOP Classes as in the DIMSE world. UPS –RS defines action types, which relate to one command in the various SOP Classes. How do we document, which of the action types referred to are supported by the client? Answer: Based on Discussions with working group 27 and also taking into account Supp 183, the tables for DIMSE and Web Services have been put into separate sub sections
13	Current Section 3 contains a lot of boiler plate text that is usually copied from Part 2. Is this really needed? Can we just reference text in Part 2? Answer: Kept information as it was in current part 2
14	Should Private Attributes be listed as a separate section or inside the created IOD Definitions? Answer: Documentation of Private Attributes follows the mechanism used for all other Attributes as well. They are documented in a section for Shared Private Attributes and also there is a specific subsection for Private Attributes in each IOD. Section 1.3: There certain action types (e.g. getCapabilities) in the Web Service definition for which there is not DIMSE equivalent. How/Where do we document them in the overview? Answer: Web Services are documented separately from DIMSE and documentation is in alignment with Supp 183. Therefore, there is no mapping between DIMSE and Web Services any more
15	Section 1.4: In DIMSE on the one hand we distinguish between different retrieve models (e.g Patient, Study, Patient Study) and between different “retrieval levels” (e.g. PATIENT, STUDY, SERIES, INSTANCE). In WADO-RS on the other hand there are the so-called action types (RetrieveStudy, RetrieveSeries, RetrieveInstance, RetrieveFrame, RetrieveBulkData, RetrieveMetaData, RetrieveRendered), which partially have an equivalent in the query level, but not all of them. However, if I understand, all these action types have to be supported anyway. Nevertheless, I was wondering whether with this background you would fill in the table (e.g you support the study root query retrieve model and you support WADO-RS, how would you set your check marks in the table). Is WADO-RS by the way it is defined per se equivalent to the STUDY retrieve level? Answer: Web Services are documented separately from DIMSE and documentation is in alignment with Supp 183. Therefore, there is no mapping between DIMSE and Web Services any more
16	Section 1.4: For WADO-RS do we need to distinguish between different Transfer Syntaxes Answer documentation is aligned with Supp 183
17	Section 7.3.9.1: For discussion with WG 27: Is this way of documenting Status Codes sufficient. Our assumption is, that for

	• User agents: We provide a description of what the system does when encountering a Status Code • Origin Server: We define the condition when a specific code is returned Answer: Documentation of Status Codes should be aligned with the way how Status Codes are documented in Supp 183
18	What is the best way to document SR content? Answer: This depends on the TID. Two examples were chosen (an Echocardiography SR as an example for a TID which has a simple structure, but needs to list a lot of different Values, and the Mammography CAD SR, which provides a complex structure)
19	The decision was made that in the IOD tables documented in Annex A all Attributes that are included in an IOD are listed and not only the optional ones. In the “Presence” column reflects the actual usage of the Attribute in the created IOD and does NOT reflect any requirements from the DICOM standard (e.g. Type 1, 2, 3, …). Answer: Approach is the same as used in existing Part PS3.2 examples, but we rather used readable terms than acronyms. Text has been improved to clarify this
20	Do we need to document the display of CAD markers, e.g the type of marker used, the condition upon which they are displayed, the handling of rendering intent, Text and measurement overlays, … or is this rather content of a user manual. Answer: Detailed information regarding the display of CAD marks should documented in the user manual. High level information is provided in the overview
21	In the Overview Section for Storage (may be moved to content section later on) do we need to indicate in addition to creation, display and process whether instances are kept permanently and made available for later usage or should we remove the “Archiving” column? Answer: For now, we decided to keep the column. Detailed information about how images are handled with regards to compression are provided in Section A.5.2.5.2 and A.5.2.5.3
22	For reasons of consistency between different documents and easier comparability should we have an exhaustive list in each table and mark supported yes and no or should we remove lines that are not supported. There are the following options a. Decide on a table by table basis b. Decide to remove non supported rows in each table c. Decide to keep all rows and mark them yes/no d. Decide to keep all rows and mark them as yes/no just in the overview Answer: Option B was chosen for easier maintenance and to allow easy searching for supported services
23	Does Section 1.1 in the Overview meet expectations for splitting out content related information from the actual services? Answer: Approach was reviewed during Nov. WG 6meeting and was approved
24	Table 5.2-8 Display and Processing Capabilities was improved to better document dependencies between Attributes, does it meet your expectations. Answer: Approach was reviewed during Nov. WG 6 meeting and was approved
25	In the storage SCU section there is information regarding Association Negotiation. Shouldn’t this be done in the Association Initiation section for the particular AE? For example, if you have multiple Storage SCU AE’s that had different association initiation policies, then it would be difficult to document here. Perhaps you could simply reference the section(s) on Association Initiation (under Section 7.x) fort he applicable AE(s)? Answer: We decided to keep it here, because the audience between Section 5 and 7 is really different and we think this information would be lost in the technical details of section 7. However, we clarified the instructions to make sure to document if differs in different scenarios

26	In the context of the above item, also provide examples/instructions that to document if this is different for a suboperation triggered by cmove, cget. Also need to see whether something similar needs to be added into cmove sections below. Answer: clarified the instructions to deal with different scenarios as well. Is this sufficient
27	Look into how to document cross service considerations. Make a subsection 5.x Cross Service Considerations. Answer: we created a subsection, but we only provided high level instructions without going into too much detail:
28	Shall we retire and create a new Annex at the end for the template defined in this document or shall we overwrite the current annex A? Answer: A new Annex will be created. The existing Annex A will remain as retired, however, for public comment the draft text will show the new Annex as letter A to avoid reformatting now. A key point is that we need to be clear that the old Annex A is still valid, which is done using our retirement convention
29	Tables in Section A.1.1 Content and Transfer of the Overview Section: For each Service Group (e.g. DIMSE, DICOM Web Services, Media Service) should there be one column to list supported roles or should there be one column for each role marked with Y/N to indicate support. Answer: For better readability and better comparability, the second approach was used throughout this document
30	Should describing multiple products / versions in a single DICOM Conformance Statement be explicitly prohibited or permitted? And if permitted, should conventions be introduced to document any differences between the included products / versions? Existing Part 2 is silent on this topic, some vendors publish a single DCS for product families Answer: Multiple products are allowed, updated instruction accordingly. Slight differences between products/versions will be documented in footnotes
31	Currently Table A.1-2 Supported Real-Time Video SOP Classes is listed in the Section for Content and Transfer. Would it be better to Create a new Service specific section A.1.x for Real Time Video? Answer: Real Time Video Information was copied into a new subsection A.1.5
32	What is the best way to describe consumption of an SR? Currently Table A.1-4 in the Overview sections provides a means to describe whether a specific IOD cannot be displayed at all, whether basic display is supported or whether structured data are extracted, or markers are displayed on an image? Is this sufficient? If not provide input on the information that is needed and how to best document it. Answer: Information currently documented is sufficient, Vendors may choose to elaborate.
33	In the Web Services subsections (Sections A.1.3.x) of the overview the resources are currently listed. Is that too much information for the overview and should we remove it? Answer Decision was to keep. It is a useful level of detail
34	How/where should the handling of SNOMED CT codes versus the use of the retired SNOMED RT codes be documented? Options include: • In the configuration section: However, that would not address product implementations that decided to use either one or the other code set or have another way of deciding which codes to set • Add a generic subsection in Section 5 to describe the Terminology used Answer: Annex A.E – Code Set usage was added

35	Do we need to document data retention capabilities in the DICOM Conformance Statement? For now, we keep it out because data retention depends on site policies and supporting functionality should be documented in product manuals. Aspects of these capabilities may be addressed in the configuration section. Answer: Section A.5.2.6.2 – SCP of the Storage Commitment SOP notes that a description of duration of storage can be documented there. However, a detailed description of retention policy capabilities is better document in other product documentation. Also add to Storage Service (maybe use different wording to indicate short term vs long term (review and reference Part 4 Section b.4.3.2. may refer to other DICOM sections as well - CP)
36	Is there a better way to represent the information in Figure A.4-1: <*Product*> Application Data Flow Diagram? Also is there an UML notation for this? Answer: No better diagram was suggested – therefore issue was closed.
37	Is it useful to keep Section A.5.2.5.3 Transcoding of Transfer Syntaxes? If this table is useful, does it contain enough information or is there additional information needed? Answer: Keep table but move it to Section A.5.2.5.1 - SCU of the Storage SOP Classes. Information in table is sufficient
38	In the Security section (section A.8), what is the right balance between listing all security profiles for transparency and opening a vulnerability risk in documenting what is supported and what is not? Answer: If not supported it is up to the vendor to document or not, update instruction accordingly. There is no documentation of vulnerabilities risks. Should we emphasize references to other security documents, or even require them; for example, the MDS2 security document? Answer: Reference is added to the beginning of Section A.8 ad A.11
39	In the Security Details section (section A.11), should we require a structured format, or is free text (as currently within) acceptable? Answer: Current structure is good. Free text for what is not defined in DICOM, Structured format for what is defined in DICOM
40	Should Annex A.12 Mapping of Attributes be extended to define mappings to or from non DICOM standards. If so, which mappings would be helpful, e.g., HL7 order messages to DMWL? Answer: Structure has been updated to accommodate for other mappings

Scope and Field of Application

This Supplement provides updates to PS3.2, redefining the content and structure of the DICOM Conformance Statement to

- Better meet the needs of all user groups (service, R&D, testing, sales, healthcare provider IT personnel …)
- Better facilitate comparability of different products' DICOM functionality
    - Provide essential information in Tables
- Avoid ambiguities/inconsistencies between different vendor documentations
- Address functionalities not currently documented (Web Services, security)
- Provide a detailed template that could be used by vendors for populating information

Changes to NEMA Standards Publications PS 3.2

Digital Imaging and Communications in Medicine (DICOM)

Part 2: Conformance *Section 1 and 2 have not been modified, the Section headings are here for editorial purposes*

1 Scope and Field of Application

2 Normative References

Modify Section 3 as indicated below

3 Definitions

Insert Section 3.12 and 3.13

3.12 HyperText Transfer Protocol (HTTP/HTTPS) Definitions

This Part makes use of the following terms defined in PS3.18

HTTP	See [RFC7230].
HTTPS	See [RFC7230].
Origin Server	See [RFC7230].
User Agent	See [RFC7230].

3.13 Web Services Definitions

This Part makes use of the following terms defined in PS3.18

Bulk Data	An object that contains an octet-stream containing one or more Value Fields (typically containing large data, such as Pixel Data) extracted from a DICOM Dataset. See Metadata. Note 1. The octet-stream does not include the Attribute Tag, Value Representation, or Attribute Length. 2. For the Value of a frame of a Pixel Data Attribute encoded in a compressed Transfer Syntax, it does not include the Basic Offset Table and Data Stream Fragment Item tags and lengths.
Bulk Data URI	A Uniform Resource Identifier that references Bulkdata.

DICOM Object	instance of a data object as defined by PS3.3 that has been allocated a unique identifier in the format specified for SOP Instance UID in PS3.3 and has been chosen as an object to be saved securely for some period of time. Within the DICOM Standard, a DICOM Object is typically a Composite Service Object Pair (SOP) Instance.
DICOM Resource	One or more DICOM Objects that are referenced by a URL.
DIMSE Proxy	An origin server that responds to DICOM Web Service requests by executing DIMSE Transactions to a backend server.
Event Report	A Dataset containing elements describing an event that occurred on the Origin server. See Section 11.12.
Metadata	A DICOM Dataset where zero or more elements (typically containing large data, such as Pixel Data) have been replaced with Bulkdata URIs.
RESTful Web Service	A web service is RESTful if it is implemented using the REST architecture and principles. See https://en.wikipedia.org/wiki/Representational_state_transfer.
Service	When used in this Part of the Standard the term Service means a set of transactions and resources to which those transactions apply.
sRGB	A standard RGB color space defined in [IEC 61966-2.1].
Status Report	A Status Report is information contained in a response payload describing warnings or errors related to a request.
Subscriber	The creator or owner of a Subscription, typically a user agent.
Target URI	The URI contained in a request message. It designates the resource that is the target of the request.
Thumbnail	A single frame image that is representative of the content of a DICOM Study, Series, Instance, or Frame. It is encoded in a Rendered Media Type. See Section 8.7.4 and Section 10.4.4.
Transaction	When used in this Part of the Standard the term transaction means an HTTP/HTTPS request/response message pair.
UTF-8	Unicode UTF-8 character set defined in [ISO/IEC 10646].

Modify Section 4 as indicated below

4 Symbols and Abbreviations

Insert the following abbreviation in the existing list of Section 4 as indicated below (alphabetical order)

QIDO Query based on ID for DICOM Objects by RESTful Services

5 Conventions

Modify Section 5.1.4 as indicated below

5.1.4 Network-Associations

An **A~~A~~ssociation** between a local Application Entity and a remote Application Entity over a network supporting a remote Real-World Activity is depicted within an Application Data Flow Diagram by placing the remote Real-World Activity to the right of the related local Application Entity with one or two arrows drawn between them as shown in Figure 5.1-4. The dashed line represents the DICOM Standard network interfaces,**~~between the local Application Entities, and whatever remote Application Entities that handle the remote Real-World Activities. An arrow from the local Application Entity to the remote Real-World Activity indicates that an occurrence of the local Real- World Activity will cause the local Application Entity to initiate an Association for the purpose of causing the remote Real-World Activity to occur.~~ which could be DICOM DIMSE,~~or~~ DICOM Web Services or DICOM Real Time Video between the local Application Entities, and whichever remote Application Entities handle the remote Real-World Activities.** An arrow from the local Application Entity to the remote Real-World Activity indicates that an occurrence of the local Real-World Activity will cause the local Application Entity to initiate an **A~~A~~ssociation**, causing the remote Real-World Activity to occur. An arrow from the remote Real-World Activity to the local Application Entity indicates that the local Application Entity expects to receive an **A~~A~~ssociation** request when the remote Real-World Activity occurs, causing the local Application Entity to perform the local Real-World Activity.

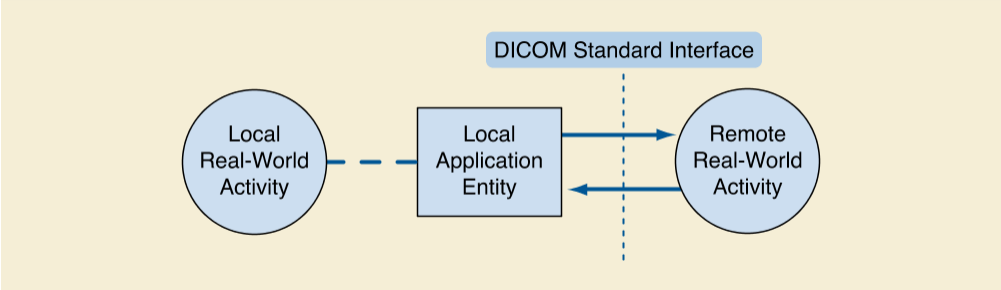

Figure 5.1-4. Associations Convention

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6 Purpose of a Conformance Statement

Modify Section 6 as indicated below

An implementation need not employ all the optional components of the DICOM Standard. After meeting the minimum general requirements, a conformant DICOM implementation may utilize the SOP Classes, communications protocols, Media Storage Application Profiles, optional (Type 3) Attributes, codes and controlled terminology, etc., needed to accomplish the designed task.

Note

In fact, it is expected that an implementation might only support the SOP Classes related to its Real-World Activities. For example, a simple film digitizer may not support the SOP Classes for other imaging modalities since such support may not be required. On the other hand, a complex storage server might be required to support SOP Classes from multiple modalities to adequately function as a storage server. The choice of which components of the DICOM Standard are utilized by an implementation depends heavily on the intended application and is beyond the scope of this Standard.

In addition, the DICOM Standard allows an implementation to extend or specialize the DICOM defined SOP Classes, as well as define Private SOP Classes.

A Conformance Statement allows a user to determine which optional components of the DICOM Standard are supported by a particular implementation, and which additional extensions or specializations an implementation adds. By comparing the Conformance Statements from two different implementations, a knowledgeable user should be able to determine whether and to what extent communications might be supported between the two implementations.

~~**Different structures are used for the content of Conformance Statements depending on**~~ **The content of Conformance Statement uses a consistent structure regardless of** whether the implementation supports a ~~**DICOM network**~~**DIMSE** interface, a DICOM Media Storage interface, **a DICOM Web Service interface, DICOM Real Time Video interface** or a combination thereof. ~~**In the latter case, a**~~**A** single Conformance Statement shall be provided **with** the appropriate sections **filled in. Sections not relevant for the implementation shall be kept and marked as not applicable. Subsections of a section marked as not applicable need not be included in the conformance statement. (See the template in Annex A)**

The first part of the **C**~~**c**~~onformance **S**~~**s**~~tatement contains a DICOM Conformance Statement Overview, which is typically **a short** ~~**one-**~~**summary at** the beginning of the document providing a high-level description **of the system.**~~**and also listing the Networking and Media Service Classes, including their roles (SCU/SCP, FSC, FSR, etc.)**~~. **It should list the transfer capabilities, DIMSE Services, Media Services, DICOM Web Services and DICOM Real Time Video Services, including their roles (SCU/SCP, FSC, FSR, etc.)**~~, and supported Transfer Syntaxes. This overview should also include a list of all Root Templates supported by the system.**

Replace Sections 6.1 and 6.2 with the Sections 6.1 to 6.4 listed below

6.1 Overview of Implementation Model Section for Conformance Statements

A functional overview containing the Application Data Flow Diagram that shows all the Application Entities. It also shows how they relate to both local and remote Real-World Activities.

6.2 Overview of Service & Interoperability Description Section for Conformance Statements

The Service & Interoperability description section of a Conformance Statement consists of the following major parts:

6.2.1 ~~•~~Mapping of Services to Application Entities

Provides an overview of the Application Entities and the Services supported by each AE.

6.2.2 Supported DIMSE Services

- Provides a more detailed specification of each SOP Classes supported within the various services (Worklist, MPPS, Storage, Query/Retrieve, Print, etc.)
- Provides for each SOP Class related to an Abstract Syntax, a list of any SOP options supported;
- Provides a description of any extensions, specializations, and publicly disclosed privatizations in this implementation;
- Provides a description of any implementation details that may be related to DICOM conformance or interoperability;
- Provides a description of which codes and controlled terminology mechanisms are used.

6.2.3 Supported DICOM Web Services

- Provides a more detailed specification of each DICOM Web Service supported

6.2.4 Supported Media Storage Services Section for Conformance Statements

The media storage section of a Conformance Statement consists of the following major parts:

- a more detailed specification of each Application Entity listing the Media Storage Application Profiles supported, which outlines the policies with which it creates, reads, or updates File-sets on the media;
- a description of any extensions, specializations, and publicly disclosed privatizations in this implementation such as Augmented or Private Application Profiles;
- a description of any implementation details that may be related to DICOM conformance or interoperability;
- a description of which codes and controlled terminology mechanisms are used.

6.3 Overview of DICOM Configuration Section for Conformance Statements

Section describing DICOM-related configuration details for the supported communication mechanisms:

- DIMSE Services
- DICOM Web Services
- Media Storage Services
- Real Time Video Services
- Audit Trail – Syslog

6.4 Overview of Network and Media Communication Details section for Conformance Statements

The network and Media Communication Details section of a Conformance Statement consists of the following major parts:

- Real-World activity Data Flow Diagrams that shows the sequencing activities among the Application Entities
- Association parameters
- Policies with which each Application Entity and Real-World Activity combination initiates or accepts Associations
- Transfer syntaxes selection preferences
- Status codes and handling for DIMSE Services and DICOM Web Services

7 Conformance Requirements

Modify Section 7 as indicated below

An implementation claiming DICOM conformance may choose to support one ~~**of the following**~~ **or more of the following communication mechanisms**:

- ~~**network conformance according to Section 7.1 (DICOM Network Conformance Requirements);**~~ **Conformance to the DIMSE protocol (see Section 7.1.1 Conformance Requirements for DICOM DIMSE Protocol)**
- **Conformance to DICOM Web Services (see Section 7.1.2 Conformance Requirements for DICOM Web Services)**
- **Conformance to DICOM Media Storage (see Section 7.2 DICOM Media Interchange Conformance Requirements)** ~~**media storage conformance according to Section 7.2 (DICOM Media Storage Conformance Requirements);**~~
- **Conformance to the DICOM Real Time Video (see Section 7.8 DICOM Real Time Video Conformance Requirements**~~**DICOM Real Time Video Conformance Requirements**~~ Formatte
- ~~**both of the above.**~~

Modify Section 7.1 as indicated below

7.1 DICOM Networking Conformance Requirements

7.1.1 Conformance Requirements for DICOM DIMSE Protocol

An implementation claiming DICOM **DIMSE** network conformance shall:

- conform to the minimum conformance requirements defined in this **S**~~**s**~~ection;
- **provide a Conformance Statement structured according to the rules and policies in this Part and follow the template provided in Annex A;**
- ~~**provide with the implementation a Conformance Statement structured according to the rules and policies in this Part including Annex A;**~~
- conform to at least one Standard or Standard Extended SOP **C**~~**c**~~lass as defined in PS3.4;

  Note

  Conformance to a Standard or Standard Extended SOP Class implies conformance to the related IOD outlined in PS3.3, the Data Elements defined in PS3.6, and the operations and notifications defined in PS3.7.

- comply with the rules governing SOP Class types outlined in Section 7.3;
- accept a Presentation Context for the Verification SOP Class as an SCP if the implementation accepts any DICOM **A**~~**a**~~ssociation requests;
- produce and/or process Data Sets as defined in PS3.5;

  Note

  Conformance to PS3.5 also implies conformance to PS3.6.

- obtain **a** legitimate right to a registered <org id> for creating UIDs (see PS3.5) if an implementation utilizes Privately Defined UIDs (i.e., UIDs not defined in the DICOM Standard);
- support the following communication mode:
  - TCP/IP (~~**S**~~**s**ee PS3.8).

Insert Section 7.1.2

7.1.2 DICOM Web Services Conformance Requirements

An implementation claiming DICOM Web Services conformance shall:

• conform to the minimum conformance requirements defined in this Section;

• provide a Conformance Statement structured according to the rules and policies in this Part and follow the template provided in Annex A;

• conform to at least one Service as defined in PS3.18;

Note

Conformance to a Service implies conformance to the related Resources defined in PS3.18 and IODs outlined in PS3.3, and Data Elements defined in PS3.6.

• comply with the rules governing SOP Class types outlined in Section 7.3;

• produce and/or process Data Sets as defined in PS3.5 and/or PS3.18;

Note: Conformance to PS3.5 and/or PS3.18 also implies conformance to PS3.6.

• obtain a legitimate right to a registered <org id> for creating UIDs (see PS3.5) if an implementation utilizes Privately Defined UIDs (i.e., UIDs not defined in the DICOM Standard).

Update Section 7.2 as indicated below

7.2 DICOM Media Interchange Conformance Requirements

An implementation claiming DICOM Media Interchange conformance shall:

- conform to the minimum conformance requirements defined in this **S**~~**s**~~ection;
- ~~**provide with the implementation a Conformance Statement structured according to the rules and policies in this Part including Annex A;**~~
- **provide a Conformance Statement structured according to the rules and policies in this Part and follow the template provided in Annex A;**
- conform to at least one Standard Application Profile as defined in PS3.11;

…

Sections 7.3 to 7.7 have not been modified, the Section headings are here for editorial purposes

705 **7.3 Rules Governing Types of SOP Classes**

7.4 Rules Governing Types of Application Profiles

7.5 Conformance of DICOM Media

7.6 Security Profiles

7.7 Transformation of DICOM to CDA

710

Insert Section 7.8

7.8 DICOM Real Time Video Conformance Requirements

An implementation claiming DICOM Real Time Video conformance shall:

715 • conform to the minimum conformance requirements defined in this Section;

• provide a Conformance Statement structured according to the rules and policies in this Part and follow the template provided in Annex A;

• conform to at least one Service as defined PS3.22;

Note:

720 Conformance to a Service implies conformance to the related IODs outlined in PS3.3, and Data Elements defined in PS3.6.

• comply with the rules governing SOP Class types outlined in Section 7.3;

• produce and/or process Data Sets as defined in PS3.5 and/or PS3.22;

Note: Conformance to PS3.5 and/or PS3.22 also implies conformance to PS3.6;

725 • obtain a legitimate right to a registered <org id> for creating UIDs (see PS3.5) if an implementation utilizes Privately Defined UIDs (i.e., UIDs not defined in the DICOM Standard).

730

Retire Annex A and replace with the following text. Replace x with the version of Standard as of retirement

A DICOM Conformance Statement Template (Normative) (Retired)

Retired. See PS3.2-202x

For Final Text Publication, please:

**** Fix inconsistent use of hyphens vs. dashs. (use what is most commonly used in the DICOM Standard)***

**** Fix inconsistent cross referencing between sections (either just by section number, or by section number and heading text, depending what is most commonly used throughout the DICOM Standard)***

**** Add another heading level (level 7) in Section A.7.3 for rows in bold text as indicated in the editor boxes***

For all of Annex A.

Note to reader: For public comment the following section is shown as ANNEX A. The letter will be revised for final text.

A DICOM Conformance Statement Template (Normative)

The content and organization of DICOM Conformance Statements shall conform to this template

The following formatting conventions are used in this template to guide Conformance Statement authors. Based on the format of the text used in the template, a DICOM Conformance Statement shall:

- Include, without modification, text shown in regular font style (i.e., non-italic). Such text is standard "boilerplate" like introductions to sections, tables that list mandatory Attributes, etc.
- Remove text shown in *italic font style* and *[enclosed by square brackets]*. Such text provides instructions to Conformance Statement authors on how to use this template. The text may be retained until the author has no further use for it but should be removed before publication of the Conformance Statement.
- Either remove text shown in *italic font* style or modify it appropriately and change it to regular font style. Such text is example text that may provide typical phrasing, examples of the types of topics that might be addressed in a certain section, or list optional Attributes which should be deleted if not supported, etc.
- Replace text <enclosed in angle brackets> with appropriate text. Such text is a placeholder for variables like the product name. Remove the < > characters when replacing the text.
- Replace text <<enclosed in double angle brackets>> with a single Value from the enclosed list. Such text provides a list of alternatives such as DICOM Defined Terms for an Attribute Value. Remove the << >> characters when replacing the text.
    - If Values other than those listed may be used, that is indicated by an ellipsis before the closing angle brackets (i.e., "…>>")
    - If multiple Values can be selected, instruction text will document that fact.
    - If some of the multiple Values are mandatory, the mandatory Values are shown in regular font style and the optional Values are shown in *italic* font style.

Note: Some sections and tables mix text in multiple fonts. Each piece of text is treated accordingly to its font style.

The following conventions are used in this template to encourage uniformity that makes it easier for consumers to read Conformance Statements from different vendors and find specific pieces of information. A DICOM Conformance Statement shall:

- Indicate support in tables (e.g., in the "SCU" and "SCP" column of table with rows for SOP Classes) by using "Y" for yes and "N" for no.
- Include rows in tables only for things (e.g., SOP Classes, Services, Attributes, etc.) supported by your implementation. Do not include rows for things that are not supported.
- Format supported Value ranges in table cells using square brackets as follows: [lower Value … upper Value].
- Format multiple supported Values in table cells separated by a semicolon in the cell.
- Replace the content of Sections that are not applicable to the implementation with the text "N/A" and append "- N/A" to the end of the section title. This is done rather than deleting the section; however, if all the subsections in a section are marked "N/A", the subsections may be deleted, and, if so, the parent section should have the text "N/A" as content, and its title should have "- N/A" appended to its original title. This keeps the numbering of sections consistent throughout DICOM Conformance Statements for easier comparison.

- If Sections need to be added, append them at the end of the parent Section in order to keep Section numbering consistent with this Template.
- Tables shall be numbered sequentially within each major subsection. It is not necessary to follow the table numbering in the template, if specific tables are not applicable for the product described in this DICOM Conformance Statement.
- Consider providing information (e.g., extensive explanation) as a footnote under the table when the information exceeds the comfortable size of the cell.

The Annexes are mandatory parts of this template and shall be populated if applicable to the implementation. For example, the IOD definitions must be filled in if the implementation supports creation of DICOM SOP Instances.

If throughout the document any of the tables get too wide for portrait mode it is recommended to switch to landscape mode for the table.

Tables are split into subsections for better readability. If a subsection of the table is not supported, remove the complete subsection from the table.

If the DICOM Conformance Statement describes multiple products/versions in one document, the cover page should indicate which products/versions are covered.

Ensure consistent spelling with the DICOM Standard throughout the entire DICOM Conformance Statement.

If this template contradicts normative statements in other Parts of the DICOM Standard, those other Parts take precedence.

The template content begins after this line.

[When using the template below for creation of a DICOM Conformance Statement, start numbering the actual document content with Section 1 for the Overview, not with A.1.]

A.0 Cover Page

[A DICOM Conformance Statement shall have a cover page, which shall include:

- *The commercial name(s) and version(s) of the concerned product or products (if applicable to several products) including all optional features. The product version shall correspond to the functionality as described in this Conformance Statement.*
- *Date of the document]*

A.1 Overview

[Provide a short description of the product's DICOM functionality.]

[Edit the following illustration, depicting DICOM Services implemented in your product and the interactions with remote systems connected to product. Replace <Product> with your product name and <Remote Systems x> with a system category such as modality, PACS, RIS, or <DICOM Service> by the applicable service such as storage, query/ retrieve, query modality worklist, ….]

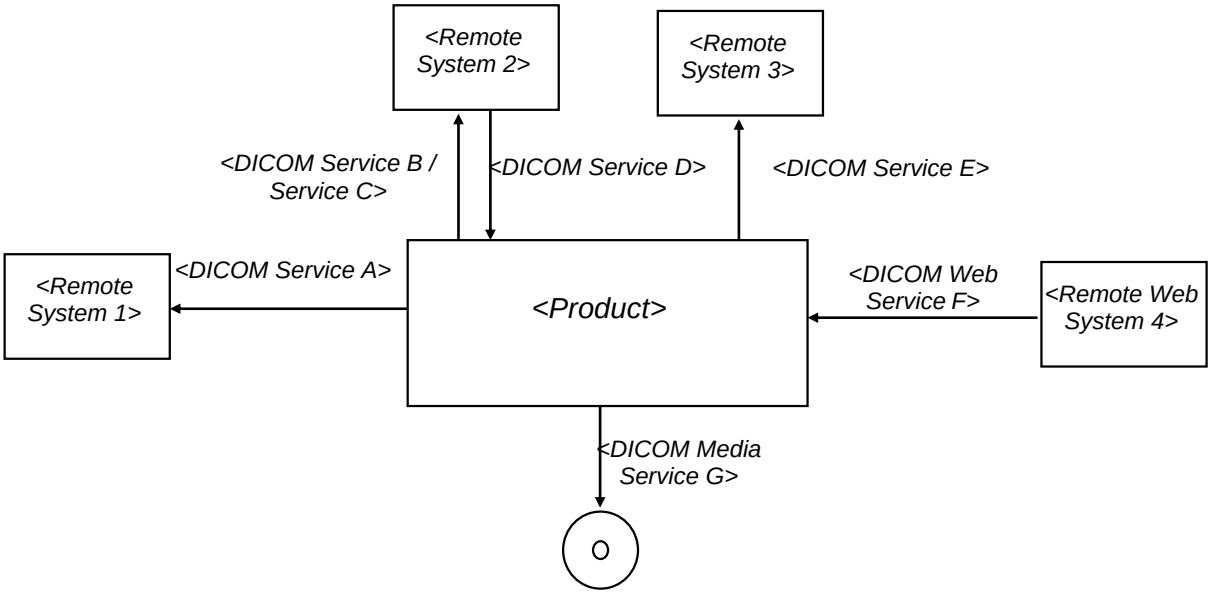

Figure A.1-1: Overview of Implemented Services

A.1.1 Content and Transfer

Table A.1-1~~Table A.1-1~~ lists all Storage SOP Classes and the supported transfer mechanisms as well as the usage scenarios for those instances.

The "Transfer Syntax Set" column lists the sets of Transfer Syntaxes defined in Table A.1-2~~Table A.1-2~~ that are applicable to each SOP Class. The "DIMSE", "DICOM Web" and "Media Services" columns indicate the roles supported for each SOP Class.

The "Function" columns indicate how the instances are used by the system:

- Create: The system creates instances of the SOP Class. The type of the created SOP Class is indicated by one of the following abbreviations:
  - S: Standard SOP Class
  - SE: Standard Extended SOP Class
  - SP: Specialized SOP Class
  - P: Private SOP Class
- Display: The system displays the instances of the SOP Class to the user, either by displaying the SOP Instances natively or by applying instances of another suitable SOP Class to the image instances (e.g., a Presentation State or CAD SR).
- Process: The system processes the instances of the SOP Class to derive some further information that is made available to the user (e.g., a CAD processing algorithm, or a 3D Rendering).
- Archive: The system stores the instances of the SOP Class and makes them available again.

[List all Storage SOP Classes supported by the system in numerical order of the SOP Class UID. Indicate in the "Transfer Syntax Set" column which of the Transfer Syntax Sets defined in Table A.1-2~~Table A.1-2~~ below are supported. Note that for each SOP Class, multiple Transfer Syntax Sets can be supported.]

[For the "Create Function" columns, use Values as defined above. For all other supported role/"Function" columns, list "Y" for yes and "N" for no.]

Table A.1-1 Storage SOP Classes

SOP Classes		Transfer Syntax Set	DIMSE Services		DICOM Web Services		Media Services			Function			
			SCU	SCP	UA	OS	FSC	FSU	FSR	Create	Display	Process	Archive
Media Storage Directory Storage	*1.2.840.10008.1.3.10*	*NI*											
Computed Radiography Image Storage	*1.2.840.10008.5.1.4.1.1.1*	*U; LL; L*											
Digital X-Ray Image Storage - For Presentation	*1.2.840.10008.5.1.4.1.1.1.1*	*U; LL; L*											
Digital X-Ray Image Storage – For Processing	*1.2.840.10008.5.1.4.1.1.1.1.1*	*U; LL; L*											
Digital Mammography X-Ray Image Storage – For Presentation	*1.2.840.10008.5.1.4.1.1.1.2*	*U; LL*											
VL Photographic Image Storage	*1.2.840.10008.5.1.4.1.1.77.1.4*	*U; LL; L*											
Video Photographic Image Storage	*1.2.840.10008.5.1.4.1.1.77.1.4.1*	*V*											
Comprehensive SR Storage	*1.2.840.10008.5.1.4.1.1.88.33*	*NI*								*See Table A.1-3~~Table A.1-3~~ below*			
Mammography CAD SR Storage	*1.2.840.10008.5.1.4.1.1.88.50*									*See Table A.1-3~~Table A.1-3~~3 below*			

[Table A.1-2~~Table A.1-2~~ defines some example Transfer Syntax Sets that are referenced by their abbreviation in Table A.1-1~~Table A.1-1~~ above. You can modify the Transfer Syntax Sets below to match your product implementation and extend the Table with additional Transfer Syntax Sets as needed. For additional Transfer Syntax Sets, create additional rows and assign abbreviations in "()" that can be referenced in the Table above.]

Table A.1-2 Supported Transfer Syntaxes

Transfer Syntax Set	Transfer Syntax Name	Transfer Syntax UID	DICOM Web Service Bulkdata Media Type
Lossless Compressed Transfer Syntax Set (LL)	*JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])*	*1.2.840.10008.1.2.4.70*	*image/jpeg*
	JPEG 2000 Image Compression (Lossless Only)	*1.2.840.10008.1.2.4.90*	*image/jp2*
	RLE Lossless	*1.2.840.10008.1.2.5*	*image/x-dicom-rle*
	JPEG Baseline (Process 1)	*1.2.840.10008.1.2.4.50*	*image/jpeg*

Lossy Compressed Transfer Syntax Set (L)	*JPEG Extended (Process 2 & 4)*	*1.2.840.10008.1.2.4.51*	*image/jpeg*
	JPEG 2000 Image Compression	*1.2.840.10008.1.2.4.91*	*image/jp2*
Non-Image Transfer Syntax Set (NI)	*Implicit VR Little Endian*	*1.2.840.10008.1.2*	*N/A*
	Explicit VR Little Endian native	*1.2.840.10008.1.2.1*	*application/octet-stream*
	Explicit VR Big Endian (Retired)	*1.2.840.10008.1.2.2*	*N/A*
Uncompressed Transfer Syntax Set (U)	*Implicit VR Little Endian*	*1.2.840.10008.1.2*	*N/A*
	Explicit VR Little Endian	*1.2.840.10008.1.2.1*	*application/octet-stream*
	Explicit VR Big Endian (Retired)	*1.2.840.10008.1.2.2*	*N/A*
Video Transfer Syntax Set (V)	*MPEG2 Main Profile / Main Level*	*1.2.840.10008.1.2.4.100*	*video/mpeg2*
	MPEG2 Main Profile / High Level	*1.2.840.10008.1.2.4.101*	*video/ mpeg2*
	MPEG-4 AVC/H.264 High Profile / Level 4.1	*1.2.840.10008.1.2.4.102*	*video/mp4*
	MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1	*1.2.840.10008.1.2.4.103*	*video/mp4*
	MPEG-4 AVC/H.264 High Profile / Level 4.2 For 2D Video	*1.2.840.10008.1.2.4.104*	*video/mp4*
Real-Time Video Transfer Syntax Set (RTV)	*SMPTE ST 2110-20 Uncompressed Progressive Active Video*	*1.2.840.10008.1.2.7.1*	*N/A*
	SMPTE ST 2110-20 Uncompressed Interlaced Active Video	*1.2.840.10008.1.2.7.2*	*N/A*
	SMPTE ST 2110-30 PCM Digital Audio	*1.2.840.10008.1.2.7.3*	*N/A*

A.1.1.1 Structured Reporting Root Template IDs

Table A.1-3~~Table A.1-3~~ lists all Template IDs (TID) of Root Templates that are supported by the system. The "Function" column indicates how the system uses the content of the DICOM SR:

- CREATE: The system creates instances using the specified TID.
- RENDER: The system displays the content of the SR, without using the data for any processing.
- EXTRACT_DATA: The system can extract structured data from the content and use the data for subsequent processing (e.g. reporting).
- OVERLAY: The system uses the information in the SR to display information directly on the images (e.g. Mammography CAD markers).
- ARCHIVE: The system stores instances for later retrieval.

The "SOP Class UID" column indicates which of the SR Storage SOP Classes are used to encode the information or to store it. If multiple SOP Classes are supported the "Condition" column describes the conditions for using the different SOP Classes.

[Table A.1-3~~Table A.1-3~~ provides some examples, add/remove TIDs to match your product implementation. Add Root TIDs in ascending numerical order.

For guidance on the meaning of the columns see description above. Note that in the "Function" column multiple Values can be listed.

It is recommended to add a link to the "Root Template ID" column to the relevant subsection of Annex A.10.]

Table A.1-3 Supported Root SR Template IDs (TID)

Name	Root TID	Function	SOP Classes		Condition
Mammography CAD Document Root	*4000*	*CREATE; ARCHIVE; OVERLAY*	*Comprehensive SR Storage*	*1.2.840.10008.5.1.4.1.1.88.33*	*Based on association negotiation*
			Mammography CAD SR Storage	*1.2.840.10008.5.1.4.1.1.88.50*	
Adult Echocardiography Procedure Report	*5200*	*EXTRACT_DATA*	*Comprehensive SR Storage*	*1.2.840.10008.5.1.4.1.1.88.33*	

A.1.2 DIMSE Services

A.1.2.1 Verification

Table A.1-4~~Table A.1-4~~ lists support for the Verification SOP Class.

[Modify Table A.1-4~~Table A.1-4~~ to reflect support for the Verification SOP Class.]

Table A.1-4 Verification SOP Class

SOP Classes		Transfer Syntax		SCU	SCP
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2		
		Explicit VR Little Endian	1.2.840.10008.1.2.1		

A.1.2.2 Storage

For details on supported Storage SOP Classes see Section A.1.1.

A.1.2.3 Workflow Management

Table A.1-5~~Table A.1-5~~ lists all supported Workflow Management SOP Classes.

[Modify Table A.1-5~~Table A.1-5~~ to reflect SOP Classes in the Workflow Management area that are supported. For each supported service indicate the role it supports. If it neither supports a SOP Class as SCU nor SCP, remove the respective line from the Table]

Table A.1-5 Workflow Management SOP Classes

SOP Classes		Transfer Syntax		SCU	SCP
	1.2.840.10008.5.1.4.31	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		

SOP Classes		Transfer Syntax		SCU	SCP
Modality Worklist Information Model – FIND		*Explicit VR Little Endian*	*1.2.840.10008.1.2.1*		
Modality Performed Procedure Step	*1.2.840.10008.3.1.2.3.3*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Storage Commitment Push Model	*1.2.840.10008.1.20.1*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Unified Procedure Step - Push	*1.2.840.10008.5.1.4.34.6.1*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Unified Procedure Step - Watch	*1.2.840.10008.5.1.4.34.6.2*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Unified Procedure Step - Pull	*1.2.840.10008.5.1.4.34.6.3*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Unified Procedure Step - Event	*1.2.840.10008.5.1.4.34.6.4*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Instance Availability Notification	*1.2.840.10008.5.1.4.33*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		

A.1.2.4 Query/Retrieve

Table A.1-6~~Table A.1-6~~ lists all supported Query/Retrieve SOP Classes.

[Table A.1-6~~Table A.1-6~~ lists some SOP Classes for querying and retrieving from a remote DICOM node, nevertheless DICOM PS3.4 defines many more additional SOP Classes for querying and retrieving. If your product supports any of these additional SOP Classes (e.g., any of the SOP Classes supporting C-GET), add them to the Table below and delete the SOP Classes not supported by your product. If you neither support a SOP Class as SCU or SCP, remove the respective line from the Table.]

Table A.1-6 Query/Retrieve SOP Classes

SOP Classes		Transfer Syntax		SCU	SCP
Patient Root Query/Retrieve Information Model – FIND	*1.2.840.10008.5.1.4.1.2.1.1*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Study Root Query/Retrieve - Information Model – FIND	*1.2.840.10008.5.1.4.1.2.2.1*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Patient Root Query/Retrieve - Information Model – MOVE	*1.2.840.10008.5.1.4.1.2.1.2*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Study Root Query/Retrieve - Information Model – MOVE	*1.2.840.10008.5.1.4.1.2.2.2*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		

A.1.2.5 Printing

Table A.1-7~~Table A.1-7~~ lists all supported Printing SOP Classes.

[Table A.1-7~~Table A.1-7~~ lists some SOP Classes for Printing and DICOM PS3.4 defines additional SOP Classes for printing. If your product supports any of these additional SOP Classes, add them to the Table below, and remove any rows that do not apply to your product. If you neither support a SOP Class as SCU nor SCP, remove the respective line from the Table]

Table A.1-7 Printing SOP Classes

SOP Classes	SOP Class UID	Transfer Syntax		SCU	SCP
Basic Grayscale Print Management Meta	*1.2.840.10008.5.1.1.9*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Basic Color Print Management Meta	*1.2.840.10008.5.1.1.18*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Basic Annotation Box	*1.2.840.10008.5.1.1.15*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Print Job	*1.2.840.10008.5.1.1.14*	*Explicit VR Little Endian*	*1.2.840.10008.1.2.1*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Presentation LUT	*1.2.840.10008.5.1.1.23*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		
Printer Configuration Retrieval	*1.2.840.10008.5.1.1.17.376*	*Implicit VR Little Endian*	*1.2.840.10008.1.2*		
		Explicit VR Little Endian	*1.2.840.10008.1.2.1*		

A.1.3 DICOM Web Services

A.1.3.1 URI Service (WADO-URI)

Table A.1-8~~Table A.1-8~~ lists details on the support of the URI Service.

[Complete Table A.1-8~~Table A.1-8~~ to indicate support for the URI Web Service.]

Table A.1-8 URI Service

Service	Transaction	User Agent	Origin Server
URI Web Service (WADO-URI)	*Retrieve DICOM Instances*		
	Retrieve Rendered Instance		

For resources supported see Table A.1-1~~Table A.1-1~~ in Section A.1.1

A.1.3.2 Studies Service

Table A.1-9~~Table A.1-9~~ lists details on the support of the Studies Service.

[Complete Table A.1-9~~Table A.1-9~~ to indicate support for the Studies Web Service]

Table A.1-9 Study Service

Service	Transaction	Resource	User Agent	Origin Server
Studies Web Service	Retrieve Capabilities			
	Retrieve (WADO-RS)	Study		
		Study Metadata		
		Study Bulkdata		
		Study Pixel Data		
		Rendered Study		
		Study Thumbnail		
		Series		
		Series Metadata		
		Series Bulkdata		
		Series Pixel Data		
		Rendered Series		
		Series Thumbnail		
		Instance		
		Instance Metadata		
		Instance Bulkdata		
		Instance Pixel Data		
		Rendered Instance		
		Instance Thumbnail		
		Frames		
		Rendered Frames		
		Frame Thumbnail		
		Bulkdata		
	Search (QIDO-RS)	All Studies		
		Study		
		Study's Series		

		Study's Instances		
		All Series		
		Series		
		Series Instances		
		All Instances		
		Instance		
	Store (STOW-RS)	All Studies		
		Study		
		Bulkdata		

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A.1.3.3 Worklist Service

Table A.1-10~~Table A.1-10~~ lists details on the support of the Worklist Service.

[Complete Table A.1-10~~Table A.1-10~~ to indicate support for the Worklist Web Service.

Table A.1-10 Worklist Service

Service	Transaction	Resource	User Agent	Origin Server
Worklist Web Service (UPS-RS)	Retrieve Capabilities			
	Create Workitem	Worklist		
		Workitem		
	Update Workitem	Workitem		
	Retrieve Workitem	Workitem		
	Change Workitem State	Workitem		
	Request Cancellation	Workitem		
	Search	Worklist		
	Subscribe	Worklist		
		Filtered Worklist		
		Workitem		
	Unsubscribe	Worklist		
		Filtered Worklist		
		Workitem		
	Suspend Global Subscription	Worklist		
		Filtered Worklist		
	Workitem Event Report			

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A.1.3.4 Non-Patient Instance Service

Table A.1-11~~Table A.1-11~~ lists details on the support of Non-Patient Instances Service.

For details on the supported resource categories (e.g., Color Palette, Defined Procedure Protocol, Hanging Protocol or Implant Templates), see Table A.1-1~~Table A.1-1~~.

945 *[Complete Table A.1-11~~Table A.1-11~~ to indicate support for the Non-Patient Instance Web Service.]*

Table A.1-11 Non-Patient Instance Service

Service	Transaction	Resource	User Agent	Origin Server
	Retrieve Capabilities			

Non-Patient Instances Web Service	*Retrieve*			
	Store			
	Search (Note)			

A.1.4 Media Services

Table A.1-12~~Table A.1-12~~ lists all supported Media Application Profiles.

[Table A.1-12~~Table A.1-12~~ lists Media Storage Application profiles and supported roles. Extend/modify the Table to list the profiles supported by your system.]

Table A.1-12 Supported Media Application Profiles

Media Storage Application Profile	FSC	FSR	FSU
Compact Disk – Recordable			
STD-GEN-CD			
AUG-GEN-CD			
DVD			
AUG-GEN-DVD-JPEG			
AUG-GEN-DVD-J2K			
STD-GEN-DVD-JPEG			
STD-GEN-DVD-J2K			
USB			
AUG-GEN-USB-J2K			
STD-GEN-USB-J2K			

A.1.5 Real Time Video Service

Table A.1-13~~Table A.1-13~~ lists all supported Real-Time Video SOP Classes and Transfer Syntaxes.

[List all supported Real-Time Video SOP Classes in the Table below. For the "Transfer Syntax Set" column use Transfer Syntax Sets defined in Table A.1-2~~Table A.1-2~~.]

Table A.1-13 Supported Real-Time Video SOP Classes

SOP Classes		Transfer Syntax Set	RTV	
			SCU	SCP
Video Endoscopic Image Real-Time Communication	*1.2.840.10008.10.1*	*RTV*		
Video Photographic Image Real-Time Communication	*1.2.840.10008.10.2*	*RTV*		
Audio Waveform Real-Time Communication	*1.2.840.10008.10.3*	*RTV*		

SOP Classes		Transfer Syntax Set	RTV	
			SCU	SCP
Rendition Selection Document Real-Time Communication	*1.2.840.10008.10.4*	*N/A*		

A.1.6 De-Identification Profiles

975 Table A.1-14~~Table A.1-14~~ lists all supported de-identification profiles and options.

[Complete Table A.1-14~~Table A.1-14~~ to list supported De-Identification profiles and options. If you do not support de-identification, remove this table, and mark section as N/A]

Table A.1-14 De-Identification Profiles

Profile	Option
Basic Application-Level Confidentiality Profile	*Clean Pixel Data Option*
	Clean Structured Content Option

980 ### A.1.7 Specific Character Sets

[List all supported Character Sets and the IANA name as well as a description in the Table below.]

Table A.1-15:Supported Specific Character Sets

Defined Term	IANA	Description
Single-Byte Character Sets without Code Extensions		
ISO_IR 6	ISO-646	Default Repertoire
ISO_IR 100	*ISO-8859-1*	*Latin Alphabet No.1 (West Europe)*
Single-Byte Character Sets with Code Extension		
ISO 2022 IR 100		*Latin Alphabet No. 1 (West Europe)*
Multi-Byte Character Sets without Code Extensions		
GB18030	*GB18030*	*GB18030-2000 (P.R China Norm GB18030)*
Multi-Byte Character Sets with Code Extensions		
ISO 2022 IR 87	*ISO-2022-JP*	*Japanese*

A.2 Table of Contents

985 *[The Table of Contents shall be provided to assist readers in easily finding the needed information.]*

A.3 Introduction

A.3.1 Revision History

[Provide the revision history for this document including the document revision, the document revision date, the product version(s) the DICOM Conformance Statement applies to and give a high-level description of changes.]

Revision	Date	Product Version(s)	Change

A.3.2 Audience

This document is intended for the audience listed below. It is assumed that the reader has a working knowledge of the DICOM Standard.

[Below is a list of typical users of a DICOM Conformance Statement, modify and add other user groups if needed.]

The document structure was designed for easier access to relevant information for different user groups:

- ***Clinical Users**, who want to get an overview of the implemented interoperability features of the system can see Section A.4 Implementation Model.*
- *Personnel involved in **Sales** can use the information in Section A.1 to assess the compatibility between different systems involved in a sales situation.*
- ***System Integrators** can use information in Section 7.8A.6~~A.6~~ during system installation and also information from Section A.5 Service and Interoperability Description for details regarding the implemented services.*
- ***Field Service Engineers** can use the details from Section A.5 Service and Interoperability Description and from Section A.7 Network and Media Communication Details~~Network and Media Communication Details~~ for troubleshooting.*
- ***Hospital IT staff** focusing on security can use the details provided in Section A.8 Security regarding implemented Security features.*
- ***Research Personnel** may be interested in using information provided in Annex 7.8A.9~~A.9~~ Information Object Definitions (IODs) or Annex A.10~~A.10~~ Structured Report Content Encoding to get detailed imaging and measurement information.*

A.3.3 Remarks

[Any important remarks, disclaimers, and general information are specified. The following example may be used as a template.]

The scope of this DICOM Conformance Statement is to facilitate integration between <*Product*> and other DICOM products. The Conformance Statement should be read and understood in conjunction with the DICOM Standard [1]. DICOM by itself does not guarantee interoperability.

- The Conformance Statement does, however, facilitate a first-level comparison for interoperability between different applications supporting compatible DICOM functionality.
- This Conformance Statement should not replace validation with other DICOM equipment to ensure proper exchange of intended information. In fact, it is the user's responsibility to perform the following validation activities:
    - The comparison of Conformance Statements from <Product> and other DICOM conformant equipment is the first step towards assessing interconnectivity and interoperability between those systems.

- Test procedures should be defined and executed to validate the required level of interoperability with specific DICOM conformant equipment, as established by the healthcare facility.

[If the product has an IHE Integration Statement, the following statement may be applicable]:

<Product> has participated in an industry-wide testing program sponsored by Integrating the Healthcare Enterprise (IHE). The IHE Integration Statement of <Product> together with the IHE Technical Framework may facilitate the process of validation testing.

A.3.4 Terms and Definitions

[Terms and definitions should be listed here. The following list includes DICOM terms, delete terms that are not used throughout the Conformance Statement, but do not add or modify terms listed here.]

The following list includes DICOM Terms, that are used throughout this conformance statement:

Abstract Syntax	The information agreed to be exchanged between applications, generally equivalent to a Service/Object Pair (SOP) Class. Examples: Verification SOP Class, Modality Worklist Information Model Find SOP Class, Computed Radiography Image Storage SOP Class.
Application Entity (AE)	A representation of the external behavior of an application process in terms of DICOM Network Services, Web Services and/or media exchange capabilities implemented in one or more roles. A single device may have multiple Application Entities.
Application Entity Title (AET)	The externally known name of an Application Entity, used to identify a DICOM application to other DICOM applications on the network.
Application Context	The specification of the type of communication used between Application Entities. Example: DICOM network protocol.
Association	A network communication channel set up between Application Entities.
Attribute	A unit of information in an Information Object Definition; a Data Element identified by a tag. The information may be a complex data structure (Sequence), itself composed of lower-level data elements. Examples: Patient ID (0010,0020), Accession Number (0008,0050), Photometric Interpretation (0028,0004), Procedure Code Sequence (0008,1032).
Data Element	A unit of information as defined by a single entry in the data dictionary. An encoded Information Object Definition (IOD) Attribute that is composed of, at a minimum, three fields: a Data Element Tag, a Value Length, and a Value Field. For some specific Transfer Syntaxes, a Data Element also contains a VR Field where the Value Representation of that Data Element is specified explicitly
Information Object Definition (IOD)	The specified set of Attributes that comprise a type of data object; does not represent a specific instance of the data object, but rather a class of similar data objects that have the same properties. Examples: MR Image IOD, CT Image IOD, Print Job IOD. The Attributes within an IOD may be specified as Mandatory (Type 1), Required but possibly unknown (Type 2), or Optional (Type 3), and there may be conditions associated with the use of an Attribute (Types 1C and 2C).
Media Application Profile	The specification of DICOM information objects and encoding exchanged on removable media (e.g., CDs).
Module	A set of Attributes within an Information Object Definition that are logically related to each other. Example: Patient Module includes Patient’s Name, Patient ID, Patient’ Birth Date, and Patient’s Sex.
Negotiation	First phase of Association establishment that allows Application Entities to agree on the types of data to be exchanged and how that data will be encoded.

Origin Server	Refers to the program that can originate authoritative responses to HTTP requests for a given Target Resource. The term “server” refers to any implementation that receives a web service request message from a user agent.
Presentation Context	The set of DICOM Network Services used over an Association, as negotiated between Application Entities; includes Abstract Syntaxes and Transfer Syntaxes.
Private SOP Class	A SOP Class that is not defined in the DICOM Standard but is published in an implementation's Conformance Statement.
Protocol Data Unit (PDU)	A packet (piece) of a DICOM message sent across the network. Devices must specify the maximum size packet they can receive for DICOM messages.
Security Profile	A set of mechanisms, such as encryption, user authentication, or digital signatures, used by an Application Entity to ensure confidentiality, integrity, and/or availability of exchanged DICOM data.
Service Class Provider (SCP)	Role of an Application Entity that provides a DICOM network service; typically, a server that performs operations requested by another Application Entity (Service Class User). Examples: Picture Archiving and Communication System (image storage SCP, and image query/retrieve SCP), Radiology Information System (modality worklist SCP).
Service Class User (SCU)	Role of an Application Entity that uses a DICOM Network Service; typically, a client. Examples: imaging modality (image storage SCU, and modality worklist SCU), imaging workstation (image query/retrieve SCU).
Service/Object Pair Class (SOP Class)	The specification of the network or media transfer (service) of a particular type of data (object); the fundamental unit of a DICOM interoperability specification. Examples: Ultrasound Image Storage Service, Basic Grayscale Print Management.
Service/Object Pair Instance (SOP Instance)	An information object; a specific occurrence of information exchanged in a SOP Class. E.g., a specific X-ray image.
Specialized SOP Class	A SOP Class that is derived from the Standard that is specialized by additional type 1, 1C, 2, 2C, or 3 Attributes, by enumeration of specific permitted Values for Attributes, or by enumeration of specific permitted Templates. The additional Attributes may either be drawn from the Data Dictionary in PS3.6 or may be Private Attributes.
Standard SOP Class	A SOP Class defined in the Standard, and that is implemented and used without any modifications.
Standard Extended SOP Class	A SOP Class that is defined in the standard, and that is extended by additional type 3 Attributes. The additional Attributes may either be drawn from the DICOM Data Dictionary in PS3.6 or may be Private Attributes.
Tag	A 32-bit identifier for a Data Element, represented as a pair of four-digit hexadecimal numbers, the "group" and the "element". If the "group" number is odd, the tag is for a private (manufacturer-specific) data element. Examples: (0010,0020) [Patient ID], (07FE,0010) [Pixel Data], (0019,0210) [private data element].
Transfer Syntax	The encoding used for exchange of DICOM information objects and messages. Examples: JPEG compressed (images), Little Endian Explicit Value Representation.
TLS-Secured Port	TCP port on which an implementation accepts TLS connections to exchange DICOM information.
Unique Identifier (UID)	A globally unique "dotted decimal" string that identifies a specific object or a class of objects; an ISO-8824 Object Identifier. Examples: Study Instance UID, SOP Class UID, SOP Instance UID.
User Agent	A client in a network protocol used in communications within a client–server distributed computing system. In particular, the Hypertext Transfer Protocol (HTTP) identifies the client software originating the request, using a user-agent header, even when the client is not operated by a user.

Value Representation (VR)	The format type of an individual DICOM data element, such as text, an integer, a person's name, or a code. DICOM information objects can be transmitted with either explicit identification of the type of each data element (Explicit VR), or without explicit identification (Implicit VR); with Implicit VR, the receiving application must use a DICOM data dictionary to look up the format of each data element.

[Modify: Add a list of product specific definitions here. If none are needed remove the following introduction and table]

The following list includes product specific definitions used throughout this Conformance Statement

Product-specific Term	*This is a product specific term used throughout this Conformance Statement*

A.3.5 Abbreviations

Abbreviations that are used in this DICOM Conformance Statement are listed here.

[It is important to add any additional terms used by the implementation. Terms in the list may also be deleted at the discretion of the implementer.]

AE	Application Entity
AET	Application Entity Title
CAD	Computer Aided Detection
CDA	Clinical Document Architecture
CID	Context Identifier
DCS	DICOM Conformance Statement
DHCP	Dynamic Host Configuration Protocol
DICOM	Digital Imaging and Communications in Medicine
ELE	Explicit VR Little Endian
FSC	File-Set Creator
FSU	File-Set Updater
FSR	File-Set Reader
IANA	Internet Assigned Numbers Authority
IHE	Integrating the Healthcare Enterprise
ILE	Implicit VR Little Endian
IOD	Information Object Definition
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
ISO	International Organization for Standardization
MPPS	Modality Performed Procedure Step
MWL	Modality Worklist
NEMA	National Electrical Manufacturers Association
NTP	Network Time Protocol
OID	Object Identifier
OS	Origin Server
PDU	Protocol Data Unit

PHI	Protected Health Information
PPS	Performed Procedure Step
QIDO-RS	Query based on ID for DICOM Objects by RESTful Services
RTV	Real Time Video
SCP	Service Class Provider
SCU	Service Class User
SDP	Service Description Protocol
SOP	Service-Object Pair
SPS	Scheduled Procedure Step
SR	Structured Reporting
STOW-RS	STore Over the Web by RESTful Services
TCP/IP	Transmission Control Protocol/Internet Protocol
TID	Template Identifier
UA	User Agent
UI	User Interface
UID	Unique Identifier
UL	Upper Layer
UPS	Unified Procedure Step
UPS-RS	Unified Procedure Step by RESTful Services
VR	Value Representation
WADO-RS	Web Access to DICOM Objects by RESTful Services
WADO-URI	Web Access to DICOM Objects by URI

A.3.6 References

[Referenced documents should be listed here, including appropriate product manuals (such as service manuals that specify how to set DICOM communication parameters). References to the DICOM Standard should provide the URL for the free published version of the Standard, but should not specify a date of publication]:

1. NEMA PS3 / ISO 12052 Digital Imaging and Communications in Medicine (DICOM) Standard, National Electrical Manufacturers Association, Rosslyn, VA USA (available free at http://www.dicomstandard.org)

2. *IHE Radiology Technical Framework available at https://www.ihe.net/Resources/technical_frameworks/#radiology*

A.4 Implementation Model

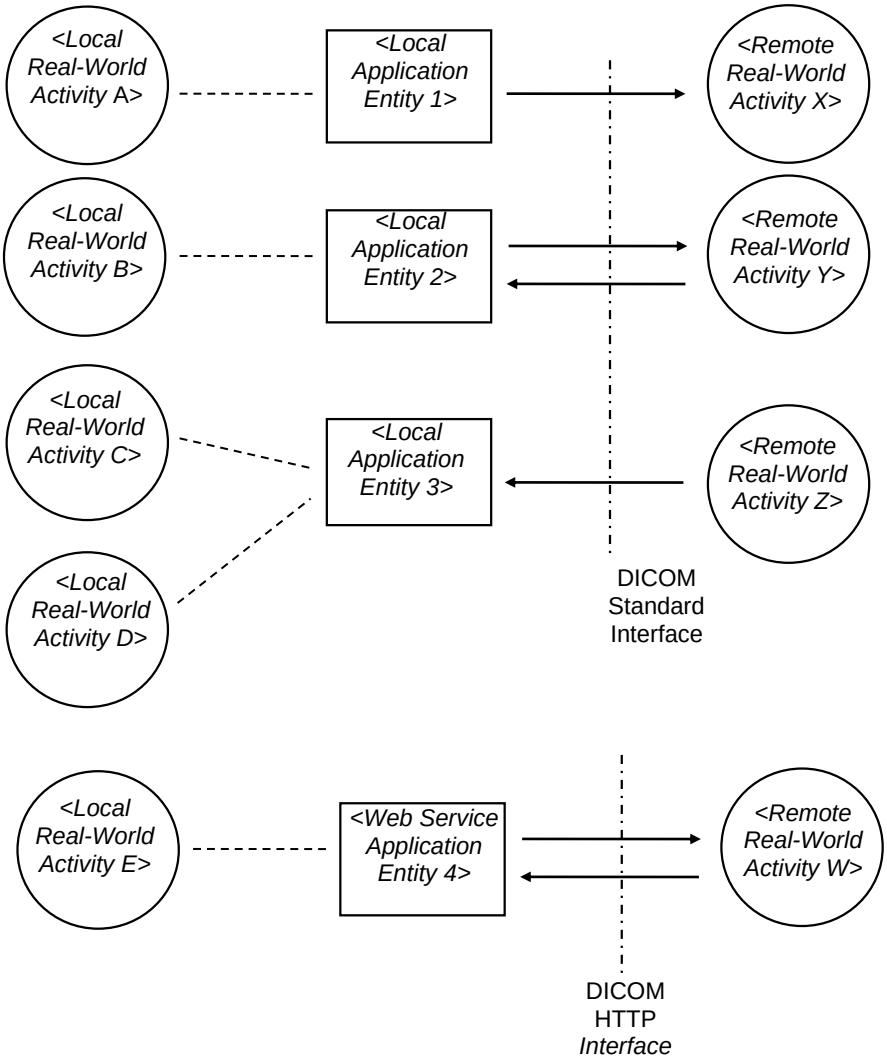
[Provide a short description of your implementation, including list of product names and versions that this DICOM Conformance Statement (DCS) intends to cover, as well as the use of DICOM Networking, DICOM Media Interchange and DICOM Web Services to achieve their purpose.]

[Also provide some high-level details of your product architecture, which are relevant to the interoperability features of the product (e.g., implementation of functionality in separate applications).]

A.4.1 Application Entities and Data Flow

The network and media interchange application model for the <*Product*> is shown in Figure A.4-1: <*Product*> Application Data Flow Diagram~~Figure A.4-1: <*Product*> Application Data Flow Diagram~~.

[Edit the Application Data Flow Diagram and description below as appropriate. Note that the Real-World Activity and Application Entity names specified in the figure must be used consistently throughout the document. If your product supports configurable AE definition, then describe the default configuration of AEs in this section. As a reminder, an AE is a representation of the external behavior of an application process in terms of DICOM network services, web services and/or media exchange capabilities implemented in one or more roles. A single device may have multiple Application Entities.]


<Local Real-World Activity A>
<Local Application Entity 1>
<Remote Real-World Activity X>
<Local Real-World Activity B>
<Local Application Entity 2>
<Remote Real-World Activity Y>
<Local Real-World Activity C>
<Local Application Entity 3>
<Remote Real-World Activity Z>
<Local Real-World Activity D>
DICOM Standard Interface
<Local Real-World Activity E>
<Web Service Application Entity 4>
<Remote Real-World Activity W>
DICOM HTTP Interface

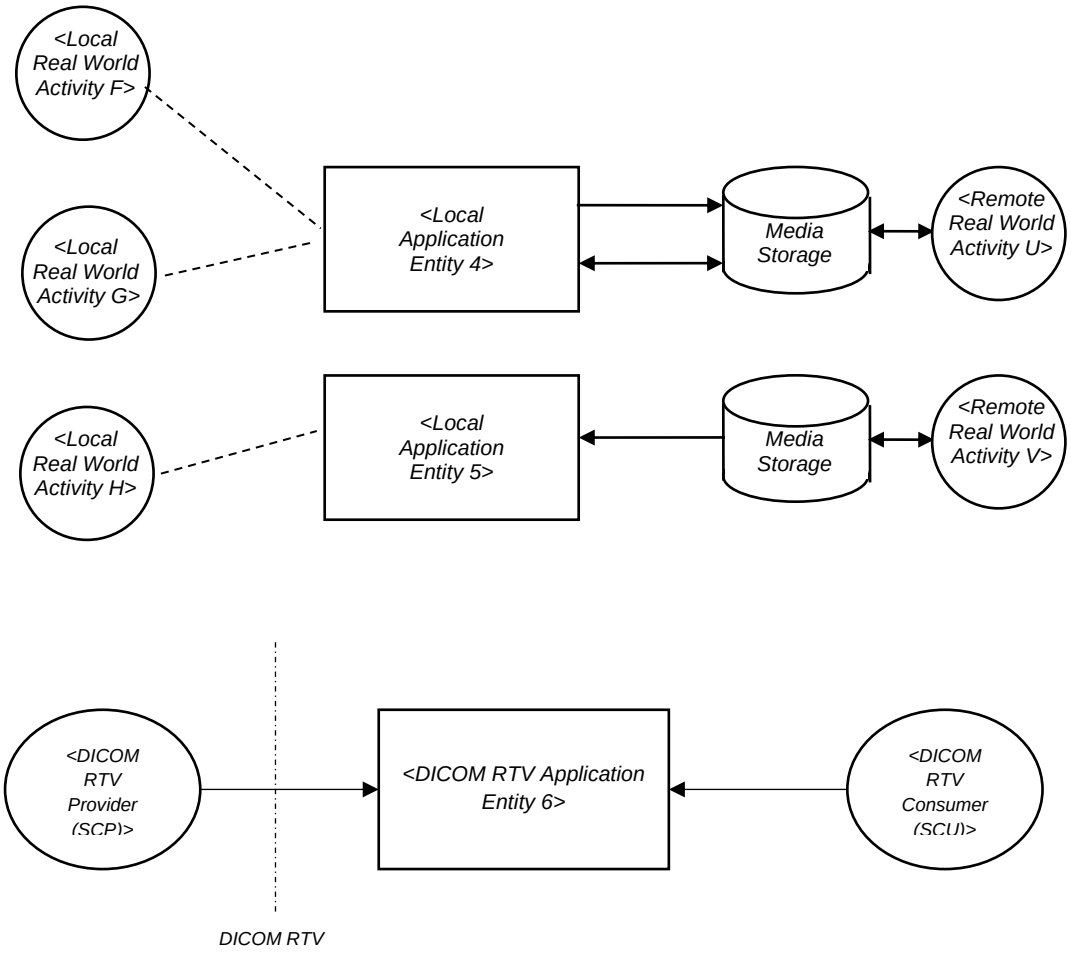


Figure A.4-1: <*Product*> Application Data Flow Diagram

[For each AE listed in Figure A.4-1~~Figure A.4-1~~ add one subsection A.4.1.x to describe the AE's DICOM functionality with regards to supported DIMSE, DICOM Web and Media Services, including the real-world activities that may trigger the service.]

[If your system supports flexible grouping of Services into Application Entities, keep the following paragraph, otherwise delete it]

This section describes the organization of the supported Services into Application Entities based on the default configuration of the system. This may change based on the actual setup at the customer site. See Section 7.8A.6~~A.6~~ for details about the configurability of Services into AEs.

A.4.1.1 Functional Definition of <*Application Entity 1*>

[Provide a functional description of <Application Entity 1>, i.e., the DICOM Services (DIMSE, DICOM Web and Media Services), and supported roles, Real World Activities triggering the service and AE specific behavior]

A.5 Service and Interoperability Description

A.5.1 Mapping of Services to Application Entities

Table A.5-1~~Table A.5-1~~ provides an overview of the Application Entities and the Services supported by each AE.

[Table A.5-1~~Table A.5-1~~ provides the mapping between Application Entities, Services and Roles as indicated in the example below.]

Table A.5-1 Service to AE Mapping

Application Entity	Supported Services	Role								
		DIMSE		DICOM Web		DICOM Media			Real-Time Video	
		SCU	SCP	Origin Server	User Agent	FSC	FSU	FSR	SCU	SCP
<Application Entity 1>	*Basic Worklist Management*									
	MPPS									
<Application Entity 2>	*Storage*									
	Storage Commitment									
	Query/Retrieve									
<Application Entity 3> *(see Note 1)*	*Storage*									
	Query/Retrieve									
<Application Entity 4>	*Print Management*									
<Media Entity 1>	*Media Storage*									
<RTV Entity 1>	*Real-Time Video*									

[If needed, explain specific behavior of an AE in a note, e.g., if you have an AE that provides specifically storage of de-identified instances or support for querying rejected instances as defined in the IOCM profile, e.g.:

Note 1: This implementation of Query/Retrieve service handles retrieval of rejected instances as defined in the IHE Radiology IOCM Profile [2].]

A.5.2 Supported DIMSE Services

[The following sections define the details of the supported DIMSE Services in more details. Fill in the information for all services supported by the system. Tables are given as examples and should be modified to meet the functionality of the system.]

A.5.2.1 Basic Worklist Management Service

A.5.2.1.1 SCU of the Modality Worklist Information Model – FIND SOP Class

As a Service Class User of the Modality Worklist Information Model – FIND SOP Class, the <*Product*> uses the C-FIND-RQ message to query the SCP. It supports the Query Keys listed in Table A.5-2~~Table A.5-2~~.

In the “Matching Type” column, the following Values can be used:

- SINGLE_VALUE: SCU can request single Value matching on this Attribute.
- UID: SCU can request List of UID matching on this Attribute.
- WILDCARD: SCU can request Wildcard matching on this Attribute.
- RANGE: SCU can request Range matching on this Attribute.
- SEQUENCE: SCU can request sequence matching on this Attribute.

- UNIVERSAL: SCU can request that the Attribute be a return Value (universal matching).

In the “Query Value Source” column, the following Values can be used:

- FIXED: The query Value cannot be modified by the user or by configuration.
- GENERATED: The query Value is generated by the system (e.g. current date as the study date).
- CONFIGURATION: The query Value is dependent on system configuration.
- USER: The query Value is entered by the user.
- SCANNED: The query Value is read from a barcode scanner or similar device.
- EMPTY: The query Value is sent with a zero-length Value to indicate it is a return key only.

In the “Display on UI” column the following Values can be used:

- D: the return Value is displayed on the main UI by default.
- C: the return Value is displayed on the main UI if configured.
- N: the return Value is never displayed.

[Modify the Table A.5-2~~Table A.5-2~~ to include all Attributes supported by your system and use the terms defined for Matching Type, Query Value Source and Display on UI above. If Display on UI Values are modified from the ones received, indicate in a footnote. If multiple Values are supported for the Query Value Source, list all of them.]

Table A.5-2 Supported C-FIND Query Parameters for Modality Worklist - SCU

Attribute Name	Tag	Matching Type	Query Value Source	Value	Dis-play on UI	Comments
Scheduled Procedure Step						
Schedule Procedure Step Sequence	(0040,0100)	*SEQUENCE*				
>Scheduled Station AE Title	(0040,0001)	*SINGLE_VALUE*	*GENERATED*		*D*	*AE title of the system performing the query*
>Scheduled Procedure Step Start date	(0040,0002)	*RANGE*	*GENERATED*		*D*	*Current date and time minus 1 hour plus 24 hours ahead*
>Scheduled Procedure Step Start Time	(0040,0003)	*RANGE*	*GENERATED*		*D*	*Current date and time minus 1 hour plus 24 hours ahead*
>Modality	(0008,0060)	*SINGLE_VALUE*	*FIXED*	*CT*		
>Scheduled Performing Physician's Name	(0040,0006)	*UNIVERSAL*	*EMPTY*		*D*	
…						
Requested Procedure						
Study Instance UID	*(0020,000D)*	*UNIVERSAL*	*EMPTY*			
…						
Imaging Service Request						
Accession Number	*(0008,0050)*	*SINGLE VALUE*	*USER*		*D*	*See Annex D for details*
Issuer of Accession Number Sequence	*(0008,0051)*	*UNIVERSAL*	*EMPTY*			
…						
Visit Identification						

Attribute Name	Tag	Matching Type	Query Value Source	Value	Dis-play on UI	Comments
…						
Visit Status						
…						
Patient Identification						
Patient's Name	(0010,0010)	*WILDCARD*	*USER*		*D*	
…						
Patient Demographics						

[Describe scenarios in which the product can issue C-FIND-CANCEL requests, e.g.,

The product issues C-FIND CANCEL requests in the following scenarios:
** Configurable maximum of matches detected*
** Initiated by user]*

[Also describe the SCU behavior if the cancellation request is ignored by the SCP and the SCP continues sending responses.]

[Document your product's query capabilities and behavior for handling non-default character sets, especially for handling person names (VR of PN).]

A.5.2.1.2 SCP of the Modality Worklist Information Model – FIND SOP Class

As a Service Class Provider of the Modality Worklist Information Model – FIND SOP Class, the <*Product*> uses the C-FIND-RSP to communicate matches back to the SCU. It supports the Matching Keys listed in Table A.5-3~~Table A.5-3~~.

In the "Matching Type" column, the following Values can be used:

- SINGLE_VALUE: SCP can perform single Value matching on this Attribute.
- UID: SCP can perform List of UID matching on this Attribute.
- WILDCARD: SCP can perform Wildcard matching on this Attribute.
- RANGE: SCP can perform Range matching on this Attribute.
- SEQUENCE: SCP can perform sequence matching on this Attribute.
- UNIVERSAL: SCP can provide the Attribute in the C-FIND response (i.e., universal matching).

[Table A.5-3~~Table A.5-3~~ below contains a set of Attributes that could be supported by a product. Add and remove Attributes in order to match your product implementation using the matching type as defined above. If multiple codes are supported, list all of them. Use the "Comments" column if clarification is needed.]

Table A.5-3 Supported C-FIND Return Keys for Modality Worklist - SCP

Attribute Name	Tag	Matching Type	Comments
Scheduled Procedure Step			
Schedule Procedure Step Sequence	(0040,0100)		
>Scheduled Station AE Title	(0040,0001)	*SINGLE_VALUE*	
>Scheduled Procedure Step Start Date	(0040, 0002)	*RANGE*	

Attribute Name	Tag	Matching Type	Comments
>Scheduled Procedure Step Start Time	(0040, 0003)	*RANGE*	
>Modality	(0008,0060)	*SINGLE_VALUE*	
>Scheduled Performing Physician's Name	(0040,0006)	*WILDCARD*	
…			
Requested Procedure			
Study Instance UID	(0020,000D)	*UNIVERSAL*	
…			
Imaging Service Request			
Accession Number	(0008,0050)	*SINGLE_VALUE*	
Issuer of Accession Number Sequence	*(0008,0051)*	*UNIVERSAL*	
Requesting Physician	(0032,1032)	*UNIVERSAL*	
Referring Physician's Name	(0008,0090)	*UNIVERSAL*	
…			
Visit Identification			
…			
Visit Relationship			
…			
Patient Identification			
…			
Patient Demographics			
…			

[Describe the behavior of the product when it receives a C-FIND-CANCEL request.]

[Document your product's query capabilities and behavior for handling non-default character sets, especially for handling person names (VR of PN).]

A.5.2.2 Modality Performed Procedure Step Service

A.5.2.2.1 SCU of the Modality Performed Procedure Step SOP Class

As a Service Class User of the Modality Performed Procedure Step SOP Class, the <*Product*> supports the Attributes listed in Table A.5-4~~Table A.5-4~~ in the N-CREATE-RQ and N-SET-RQ messages, if it creates the message.

In the "Source" column the following Values can be used:

- FIXED: the Value is pre-defined and cannot be modified.
- GENERATED: the Value is generated by the system.
- CONFIGURATION: the Value is copied from system configuration.
- MWL: the Value is copied from modality worklist entry.
- USER: the Value is entered by the user.
- SCANNED: the Value is read from a barcode scanner or similar device.
- EMPTY: The Attribute is sent with a zero-length Value

[List all Attributes provided in the MPPS message and list the Values that are used to populate the N-CREATE or N-SET messages, add or remove Attributes as applicable for your product and note that in the "Source" column, multiple Values can be provided in a semicolon separated list.]

1220 **Table A.5-4 Supported N-CREATE and N-SET Attributes for Modality Performed Procedure Step - SCU**

Attribute Name	Tag	Source	Value N-CREATE	Value N-SET	Comments
Specific Character Set	(0008,0005)	*FIXED*	*ISO_IR 100*	*ISO_IR 100*	
Performed Procedure Step Relationship					
Scheduled Step Attribute Sequence	(0040,0270)				
>Study Instance UID	(0020,000D)	*MWL*			
>Accession Number	(0008,0050)	*MWL; USER; EMPTY*			
>Issuer of Accession Number Sequence	*(0008,0051)*	*MWL; GENERATED*			
…					
Patient's Name	(0010,0010)	*MWL; USER*			
Patient ID	(0010,0020)	*MWL; GENERATED*			
…					
Performed Procedure Step Information					
Performed Procedure Step ID	(0040,0253)				
…					
Performed Procedure Step Status	(0040,0252)	*GENERATED*	*DISCONTINUED*		
Performed Procedure Step Discontinuation Reason Code Sequence		*GENERATED*		*[Either reference CID 9301 or provide the supported Code Set, if the Performed Procedure Step Status is set to DISCONTINUED]*	
…					
Image Acquisition Results					
Modality	(0008,0060)	*GENERATED*	*CT*		
Study ID	(0020,0010)	*GENERATED*	*Copied from Requested Procedure ID*		

Attribute Name	Tag	Source	Value N-CREATE	Value N-SET	Comments
Performed Protocol Code Sequence	(0040,0260)	*GENERATED*			
…					

[Describe the triggers by which your product initiates sending messages, e.g., the N-CREATE is sent when starting image acquisition and N-SET is sent when the study is closed.]

[If product also supports forwarding of MPPS messages (e.g., as described by the MPPS Manager Actor in the IHE Schedule Workflow profile), provide a description of the product behavior here.]

A.5.2.2.2 SCP of the Modality Performed Procedure Step SOP Class

As a Service Class Provider of the Modality Performed Procedure Step SOP Class, the product receives N-CREATE-RQ and N-SET-RQ messages from a remote SCU indicating the status of a procedure.

[Indicate in the table below whether your product has specific requirements with regards to the message content, e.g., whether specific Attributes are required using Y for yes and N for no]

Table A.5-5~~Table A.5-5~~ lists the message content that is required.

Table A.5-5 Supported N-CREATE and N-SET Attributes for Modality Performed Procedure Step - SCP

Attribute Name	Tag	Required in N-CREATE	Required in N-SET	Comments
Specific Character Set	(0008,0005)			
Performed Procedure Step Relationship				
Scheduled Step Attribute Sequence	(0040,0270)			
>Study Instance UID	(0020,000D)			
>Accession Number	(0008,0050)			
>Issuer of Accession Number Sequence	*(0008,0051)*			
Patient Name	(0010,0010)			
Patient ID	(0010,0020)			
…				
Performed Procedure Step Information				
c	(0040,0253)			
Performed Procedure Step Discontinuation Reason Code Sequence				
…				
Image Acquisition Results				
Modality	(0008,0060)			
Study ID	(0020,0010)			

Attribute Name	Tag	Required in N-CREATE	Required in N-SET	Comments
Performed Protocol Code Sequence	(0040,0260)			
…				

[Describe the behavior of the product upon receiving an MPPS message, both the N-CREATE and the N SET.]

A.5.2.3 Unified Worklist and Procedure Step Service

[If your product supports any of the Unified Worklist SOP Classes, list the supported SOP Classes, the role, a list of supported messages, and the content of each supported message. If one or more of the Unified Worklist SOP Classes are not supported, keep the section, but include text indicating the SOP Class is "N/A".]

A.5.2.4 Instance Availability Notification Service

A.5.2.4.1 SCU of the Instance Availability Notification SOP Class

As a Service Class User of the Instance Availability Notification SOP Class, the system uses the N-CREATE-RQ message to inform remote SCPs about the availability and status of instances stored. Details of the message content are summarized in Table A.5-6~~Table A.5-6~~.

In the "Source" column the following Values can be used:

- FIXED: The Value is predefined and cannot be modified by data entry or by configuration.
- GENERATED: The Value is generated by the system (e.g., current date as the study date).
- CONFIGURATION: The Value is dependent on system configuration.
- IMAGE: The Value is copied from the SOP Instance.
- MWL: The Value is copied from Modality Worklist entry.
- MPPS: The Value is copied from the MPPS message.

[The table below lists some Attribute for instance availability notification as examples. Complete table with Attributes supported by your product. For the "Source" column use Values as defined above.]

Table A.5-6: Supported N-CREATE Attributes for Instance Availability Notification - SCU

Attribute Name	Tag	Source	Value	Comments
Specific Character Set	(0008,0005)	*FIXED*	*ISO_IR 100*	
Referenced Performed Procedure Step Sequence	(0008,1111)	*GENERATED*		
>…	(0008,1150)			
>Performed Workitem Code Sequence	(0040,4019)	*GENERATED*		
>>…				
Study Instance UID	(0020,000D)	*IMAGE*		
Referenced Series Sequence	(0008,1115)	*IMAGE*		
>Series Instance UID	(0020,000E)	*IMAGE*		
>Referenced SOP Sequence	(0008,1199)	*IMAGE*		
>>…				

Attribute Name	Tag	Source	Value	Comments
>>Instance Availability	(0008,0056)	*GENERATED*	*See Table A.5-7~~Table A.5-7~~*	
>>Retrieve AE Title	(0008,0054)	*CONFIGURATION*		
…				

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The <*Product*> supports the Values listed in Table A.5-7~~Table A.5-7~~, for the Instance Availability (0018,0056) Attribute.

[Fill in the table with Values supported for the Instance Availability Attribute and define the meaning of these Values in the context of your <Product>]

Table A.5-7: Meaning of Instance Availability Values - SCU

Value	Meaning
ONLINE	
NEARLINE	
OFFLINE	
UNAVAILABLE	

[Describe the mechanism that triggers sending of an Instance Availability Notification, the frequency and retrieve capabilities for referenced instances.]

[Describe the relationship between the Instance Availability Notification and Performed Procedure Step SOP Class, if both are supported.]

A.5.2.4.2 SCP of the Instance Availability Notification SOP Class

As a Service Class Provider of the Instance Availability Notification SOP Class, the system receives the N-CREATE-RQ message containing information on the availability and status of instances stored.

Table A.5-8~~Table A.5-8~~ describes the behavior of <*Product*> when encountering one of the following Values for the Instance Availability (0018,0056) Attribute.

[Fill in the table with Values supported for the Instance Availability Attribute and define the policies of the product upon encountering these Values.]

Table A.5-8: Behavior on Instance Availability Values -SCP

Value	Behavior
ONLINE	
NEARLINE	
OFFLINE	
UNAVAILABLE	

[Describe the relationship between the Instance Availability Notification and Performed Procedure Step SOP Class, if both are supported and if a relationship exists.]

A.5.2.5 Storage Service

A.5.2.5.1 SCU of the Storage SOP Classes

As a Service Class User of the Storage Service Class, the <*Product*> uses the C-STORE-RQ message to request storage of DICOM objects by a remote SCP. See Section A.1.1~~A.1.1~~ Content and Transfer in the Overview for the list of supported SOP Classes.

For details regarding the content of SOP Instances that are created by the system, see Annex A.9, which describes the underlying IOD of the supported SOP Classes.

[Provide some details regarding the triggering of storage requests (e.g. automatically when an instance is stored, automatically when the study is closed, or initiated by the user).]

[Describe when and how your product divides sets of instances into multiple series and or studies and how these are ordered.]

[Describe the behavior of your product in the case of a C-STORE operation using a referenced pixel data Transfer Syntax such as JPIP Referenced Pixel Data Transfer Syntax. This includes the duration of validity of the reference.]

A.5.2.5.1.1 Transcoding of Transfer Syntaxes

[For implementations that store locally using multiple Transfer Syntaxes and if the SCU includes multiple Transfer Syntaxes in each Presentation Context it negotiates, the following can provide a useful summary for assessing compatibility with receiving systems. If this information is not useful for your product, replace the content of this Section with the text "N/A" and append "- N/A" to the end of the section title.]

Table A.5-9: Transcoding of Transfer Syntaxes~~Table A.5-9: Transcoding of Transfer Syntaxes~~ describes supported transcodings between the locally stored encoding of SOP Instances and the negotiated Transfer Syntax. The following Values can be used:

- SUPPORTED: Transcoding is possible and same SOP Instance UID is re-used.
- NEW_UID: Transcoding is possible; however a new SOP Instance is created for transfer, e.g. due to lossy compression.
- NOT_SUPPORTED: Transcoding is not possible.

[Table A.5-9~~Table A.5-9~~ shows an example of how this transcoding could look, modify and add columns and rows as needed for Transfer Syntaxes supported by your product. If you need to provide further details on specific transcoding those can be added as notes below the table.]

Table A.5-9: Transcoding of Transfer Syntaxes

Sent Transfer Syntax / Stored Transfer Syntax	**Implicit VR Little Endian**	***Explicit VR Little Endian***	***JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14)***	***JPEG Baseline (Process 1)***	*…*
Implicit VR Little Endian		*SUPPORTED (See Note 1)*	*SUPPORTED*	*NEW_UID*	
Explicit VR Little Endian	*SUPPORTED*		*SUPPORTED*	*NEW_UID*	
JPEG Lossless, Non-Hierarchical, First-Order	*SUPPORTED*	*SUPPORTED*		*NEW_UID*	

Prediction (Process 14)					
JPEG Baseline (Process 1)	*NOT_SUPPORTED*	*NOT_SUPPORTED*	*NOT_SUPPORTED*		
ACME Private Transfer Syntax 1 (See note 2)	*NOT_SUPPORTED*	*SUPPORTED*	*NOT_SUPPORTED*	*NOT_SUPPORTED*	
…					

Note 1: Explanation of the details of the transcoding (e.g., for known Private Attributes, the correct VR will be used. All others will be encoded as VR UN)

Note 2: This Private Transfer Syntax is using Explicit VR Little Endian with compressed pixel data.

A.5.2.5.2 SCP of the Storage SOP Classes

As a Service Class Provider of the Storage Service Class, the <*Product*> receives the C-STORE-RQ message from remote SCUs. See Section A.1.1 Content and Transfer in the Overview for the list of supported SOP Classes.

Table A.5-10~~Table A.5-10~~ defines the conformance levels of <*Product*>

Table A.5-10: Levels of Conformance

Levels of Conformance	*<<0, 1, or 2>>*
Level of Digital Signature Support	*<<1, 2, or 3>>*

The <*Product*> coerces the Attributes listed in Table A.5-11~~Table A.5-11~~ upon receiving them from other systems.

The “SOP Class UID” column indicates whether the coercion is applicable to specific SOP Classes or to “ALL” SOP Classes.

The “Type of Change” column defines the coercion done to the Attributes, the following Values can be used:

- MODIFIED: The Value of the Attribute is changed; the new Value is described in the “New Value” column.
- ADDED: The Attribute is added with the Value defined in the “New Value” column.
- REMOVED: That Attribute is completely removed from the instance.

The “Condition” column defines the condition under which coercion is performed. The following Values can be used:

- ALWAYS: Data coercion is performed on each instance of the specified SOP Class that is received by the system.
- EXTERNAL: Data coercion is performed on instances received from systems external to the institution.
- CONFIGURATION: Data coercion is performed based on system configuration.
- OTHER: Data coercion is performed for other conditions. Details are defined in the “Comments” column.

[Table A.5-11~~Table A.5-11~~ defines some examples on which data coercion can be performed. Add/remove scenarios as they apply to your product implementation. In case you use OTHER as a condition, the “Comments” column must be used to define the condition in further detail. It is recommended to include Attributes that are coerced in the Modified Attributes Sequence (0400,0550) of the Original Attributes Sequence (0400,0561), which is documented in Annex A.9.1.1.]

Table A.5-11: Attribute Coercion by Storage SCP

Attribute Name	Tag	SOP Class UID	Type of Change	New Value	Condition	Comments
Patient ID	*(0010, 0020)*	*ALL*	*MODIFIED*	*Local patient ID*	*EXTERNAL*	

Issuer of Patient ID	*(0010, 0021)*	*ALL*	*ADDED*	*Local site as Issuer*	*ALWAYS*	
Lossy Image Compression	*(0028, 2110)*	*ALL*	*ADDED*	*01*	*CONFIGURATION*	*If lossy compression is enabled on system*
Patient Name	*(0010, 0010)*	*CT Image Storage (1.2.840.10008.5.1.4.1.1.2)*	*MODIFIED*	*Pat_xxx (where xxx is a sequential number)*	*OTHER*	*Studies received through CLINICALTRIAL AE*
…						

Table A.5-12~~Table A.5-12~~ lists any limitations on displaying or processing instances, e.g., display or processing of the respective SOP Instances is prevented by an unsupported Value for an Attribute or the absence of that Attribute.

[*When a Limitation is based on multiple Attributes (e.g., images cannot be displayed, if they are lossless compressed and encoded as Photometric Interpretation RGB), the Attributes are listed each in a row and the "Comments" and "Effect" cells are merged as shown in the example below. The "Comments" column is used to explain as necessary. Also use this mechanism when documenting restrictions based on Private Attributes, e.g., list the Private Creator attribute as well as the Private Attribute.]*

The "Effect" column describes what happens if the limitation is encountered. The following Values are used:

- ND: Display is not possible
- LD: Display is limited
- NP: Processing is not possible
- LP: Processing is limited
- OT: Other effects described in the "Comments" column

[If there are no restrictions on display or processing requirements, replace the sentence above with No restriction to display or post processing apply.]

Table A.5-12: Display and Processing Limitations for Storage SCP

Limitation Case			Effect	Comments
Attribute Name	**Tag**	**Value**		
CT Image Storage *(1.2.840.10008.5.1.4.1.1.2)*				
Bits Stored	*(0028,0101)*	*16*	ND	
Digital Mammography X-Ray Image – Storage for Processing *(1.2.840.10008.5.1.4.1.1.1.2.1)*				
Detector ID	*(0018,700A)*	*ABSENT*	*NP*	*Value needs to be present for Licensing purposes*
MR Image Storage *(1.2.840.10008.5.1.4.1.1.4)*				
Private Creator	*(0009,00xx)*	*MyCompany PrivateCreator*	*LD*	*Different Diffusion directions and B Factors are not recognized for Diffusion Images*
Diffusion B Factor	*(0009,xx01)*	*ABSENT*		
Diffusion Direction	*(0009,xx02)*	*ABSENT*		

All SOP Classes				
Transfer Syntax UID	*(0002,0010)*	*1.2.840.10008.1.2.4.70*	*ND*	*Lossless compressed RGB images cannot be displayed*
Photometric Interpretation	*(0028,0004)*	*RGB*		

Table A.5-13~~Table A.5-13~~ lists the actions performed upon receiving instances from a remote AE and the system behavior when certain conditions are encountered

[Fill in Table A.5-13~~Table A.5-13~~ for details. The Table shows some examples which can be reused, modified, deleted, or extended based on your product implementation]

Table A.5-13: Behavior when storing Instances

Action upon Receiving	Condition	System behavior
Perform Attribute Validation	*Minor DICOM inconsistencies*	*Fix error and log warning message:* *•Incorrect characters are replaced with "?"* *•Attributes exceeding length of VR are truncated* *•Type 2 Attributes not present are inserted with zero length*
	Duplicate Instance	*<Reject/Overwrite/Ignore> Instances*
	DICOM Validation error	*Send failure code on Association*
	Success	*Instances are stored in an internal database*
Add to an existing study	*Mismatch in patient identifying information detected*	*Instances are stored in an exception queue*
	Success	*Instances are stored in a local database*
Localize Patient Information	*Patient mismatch detected*	*Instances are stored in an exception queue*
	Success	*Original patient identity information is copied to Other Patient ID Sequence (0010,1002)* *Instances are stored in an internal database.*
Coerce non-patient-identifying Attributes	*Success*	*Original Values of coerced Attributes are copied to the Original Attributes Sequence (0040,0561).* *Instances are stored in a local database*
Evaluate Key Object Selection Document Title	*Manifest*	*Use referenced data for cross-enterprise document sharing (IHE XDS-I).*
	Rejected for Quality Reasons Rejected for Patient Safety Reasons	*Only provide instances referenced in retrieval on a specialized AE title*

	Incorrect Modality Workflist Entry	*Hide instances from display and never provide in retrieve requests*
	All other document titles	*Display key images according to the specified title*
…		

Table A.5-14~~Table A.5-14~~ describes how the SCP handles compression for stored instances.

The following Values are used in the "Behavior" column:

- AS_IS: Images are stored as received.
- CONFIGURATION: Images are compressed based on internal configuration settings.
- OTHER: All other conditions, which are further described in the "Comments" column.

The Transfer Syntax is used to describe the compression mechanism applied.

Table A.5-14: Image Compression by Storage SCP

SOP Class		Behavior	Transfer Syntax		Comments
Digital Mammography X-Ray Image Storage – For Processing	*1.2.840.10008.5.1.4.1.1.1.2.1*	*CONFIGU-RATION*	*JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])*	*1.2.840.10008.1.2.4.70*	
Video Photographic Image Storage	*1.2.840.10008.5.1.4.1.1.77.1.4.1*	*CONFIGURATION*	*JPEG Baseline (Process 1)*	*1.2.840.10008.1.2.4.50*	
All other SOP Classes		*AS_IS*			

[Describe the mechanism by which additional SOP Classes are dynamically supported.]

[Describe storage details noted in DICOM PS3.4 Section B.4.3.2]

A.5.2.6 Storage Commitment Service

A.5.2.6.1 SCU of the Storage Commitment SOP Class

As a Service Class User of the Storage Commitment SOP Class, the <*Product*> uses the N-ACTION-RQ message to request storage commitment from a remote SCP. In turn, it receives N-EVENT-REPORT-RQ messages from the SCP indicating success or failure of the request.

[Provide a list of Storage SOP Classes for which the product requests storage commitment. Also indicate whether this is configurable.]

[If Storage Commitment is provided for all supported SOP Classes, you can provide a reference to the list of supported Storage SOP Classes in Section A.1.1]

As a Service Class User of the Storage Commitment Push Model SOP Classes the product supports committing all Storage SOP Classes listed in Section A.1.1 Content and Transfer are supported.

[If Storage Commitment is provided for a subset of all supported Storage SOP Classes, provide a list of those, and delete the paragraph above.]

[Specify whether your product supports the Storage Media File Set ID and UID Attributes in the N-ACTION-Request. If this is supported, also list the Media Application profiles supported in this context.]

[Describe whether your product supports receiving the N-EVENT-REPORT request on the same Association as the N-ACTION.]

[Document the Behavior of <product> upon receiving an N-EVENT-REPORT with an Event Type ID of 1, e.g.

Upon receiving an N-EVENT-REPORT with an Event Type of 1 Instances will be removed from system after a configurable amount of time or if space is needed]

Table A.5-15~~Table A.5-15~~ lists the behavior of <*Product*> for each possible Failure Reason (0008,1197) in the Failed SOP Sequence (0008,1198) upon receiving an N-EVENT-REPORT request from the SCP with an Event Type ID of 2 (Storage Commitment Request Complete – Failures Exist).

[Fill in the behavior of your product upon encountering the Status Code. Note that for each code, that is listed in the table, a behavior needs to be provided. If your system does not support specific codes, list "Code is ignored by the system".]

Table A.5-15: Failure Behavior for Storage Commitment SCU

Status Code	Description	Behavior
0110	Processing failure: A general failure in processing the operation was encountered.	*The request for storage commitment is marked as failed. A warning is displayed if the user tries to delete affected instances*
0112	No such object instance: One or more of the elements in the Referenced SOP Instance Sequence was not available.	*The instance is re-sent, and the N-ACTION request is repeated.*
0119	Class / Instance conflict: The SOP Class of an element in the Referenced SOP Instance Sequence did not correspond to the SOP Class registered for this SOP Instance at the SCP.	*Code is ignored by the system*
0122	Referenced SOP Class not supported: Storage Commitment has been requested for a SOP Instance with a SOP Class that is not supported by the SCP.	*The request for storage commitment is marked as failed. A warning is displayed if the user tries to delete affected instances*
0131	Duplicate Transaction UID: The Transaction UID of the Storage Commitment Request is already in use.	*The request for storage commitment is marked as failed. A warning is displayed if the user tries to delete affected instances*
0213	Resource limitation: The SCP does not currently have enough resources to store the requested SOP Instance(s).	*The request for storage commitment is marked as failed. A warning is displayed if the user tries to delete affected instances*

[Describe your product behavior in case the N-EVENT-REPORT request is not received after a specific time, e.g., <Product> expects to receive the N-EVENT-REPORT request in a configurable time frame after the N-ACTION is sent. If the N-EVENT-REPORT is not received within this configurable timeframe it repeats the N-ACTION-REQUEST.]

[Describe the policies for deleting instances from your product, both upon successful storage commitment as well as in failure scenarios.]

A.5.2.6.2 SCP of the Storage Commitment SOP Class

As a Service Class Provider of the Storage Commitment SOP Class, the <*Product*> receives the N-ACTION-RQ message to request storage commitment from a remote SCU. In turn it initiates the N-EVENT_REPORT-RQ messages to the SCU indicating success or failure of the request.

[Describe whether your product supports sending the N-EVENT-REPORT request on the same Association as the N-ACTION.]

Table A.5-16~~Table A.5-16~~ lists conditions upon which an error code is sent in the Failure Reason (0008,1197) Attribute in the Failed SOP Sequence (0008,1198) of the N-EVEN-REPORT request.

[Fill in the conditions under which your product is sending the listed Status Codes. Note that for each code listed in the table, a condition needs to be provided. If your system does not support specific codes, list "Code is not supported"]

Table A.5-16: Failure Conditions on Storage Commitment SCP

Status Code	Description	Conditions
0110	Processing failure: A general failure in processing the operation was encountered.	
0112	No such object instance: One or more of the elements in the Referenced SOP Instance Sequence was not available.	
0119	Class / Instance conflict: The SOP Class of an element in the Referenced SOP Instance Sequence did not correspond to the SOP Class registered for this SOP Instance at the SCP.	
0122	Referenced SOP Class not supported: Storage Commitment has been requested for a SOP Instance with a SOP Class that is not supported by the SCP.	
0131	Duplicate Transaction UID: The Transaction UID of the Storage Commitment Request is already in use.	
0213	Resource limitation: The SCP does not currently have enough resources to store the requested SOP Instance(s).	

[Specify whether your product supports the Storage Media File Set ID and UID Attributes in the N-ACTION-Request. If this is supported, also list the Media Application profiles supported in this context.]

[Specify whether the Retrieve AE title Attribute is supported and if so, what policies exist for its usage.]

[Describe the policies and nature of commitment of the product, e.g., the duration of storage, retrieve capabilities, latency, capacity, and other pertinent information.]

[Describe how long the product typically needs to send the N-EVENT-REPORT-RQ after the N-ACTION-RQ is received.]

A.5.2.7 Query/Retrieve Service Class

[The sections below define some of the most used Query Retrieve SOP Classes as examples, however, there are many more Query/Retrieve SOP Classes defined in DICOM PS 3.4. If your product supports any of these additional

SOP Classes, add additional Sections for these SOP Classes for SCU and SCP using the structure as indicated for any of the SOP Classes below.]

A.5.2.7.1 SCU of the Study Root Q/R Information Model – FIND SOP Class

As a Service Class User of the Study Root Q/R - Information Model - FIND SOP Class, the <*Product*> uses the C-FIND-RQ message and supports the Query Keys listed in Table A.5-17~~Table A.5-17~~ for hierarchical queries.

In the "Matching Type" column the following Values can be used:

- SINGLE_VALUE: SCU can request Single Value matching on this Attribute.
- UID: SCU can request List of UID matching on this Attribute.
- WILDCARD: SCU can request Wildcard matching on this Attribute.
- RANGE: SCU can request Range matching on this Attribute.
- SEQUENCE: SCU can request Sequence matching on this Attribute.
- UNIVERSAL: SCU can request that the Attribute be a return Value (universal matching).

In the "Query Value Source" column the following Values can be used:

- FIXED: The query Value cannot be modified by the user or by configuration.
- GENERATED: The query Value is generated by the system (e.g., current date as the study date).
- CONFIGURATION: The query Value is dependent on system configuration.
- USER: The query Value is entered by the user.
- SCANNED: The query Value is read from a barcode scanner or similar device.
- EMPTY: The query Value is sent with a zero-length value to indicate it is a return key only.

In the "Display on UI" column the following Values can be used:

- D: the return Value is displayed on the main UI by default.
- C: the return Value is displayed on the main UI if configured.
- N: the return Value is never displayed.

[Modify the table below to include all Attributes supported by your system (standard Attributes as well as private Attributes) and use the terms defined for matching type, query Value source and Display on UI above. If multiple codes are supported, list all of them.]

Table A.5-17: Supported C-FIND Attribute Matching for Study Root Q/R Model -SCU

Attribute Name	Tag	Matching Type	Query Value Source	Value	Display on UI	Comments
Study Level						
Study Date	(0008,0020)	*RANGE*	*USER*		*D*	
Study Time	(0008,0030)	*RANGE*	*USER*		*D*	
Accession Number	(0008,0050)	*SINGLE_ VALUE*	*USER*		*D*	
Patient's Name	(0010,0010)	*WILDCARD*	*USER*		*D*	
Patient ID	(0010,0020)	*SINGLE_ VALUE*	*USER, GENERATE D*		*D*	
Study Instance UID	(0020,000D)	*UNIVERSAL*	*EMPTY*		*N*	
Modalities in Study	*(0008,0061)*	*SINGLE_ VALUE*	*USER*		*D*	
Study Description	*(0008,1030)*	*WILDCARD*	*USER*		*D*	
…						
Series Level						

Attribute Name	Tag	Matching Type	Query Value Source	Value	Display on UI	Comments
Modality	*(0008,0060)*	*SINGLE_ VALUE*	*USER*		*D*	
Body Part Examined	*(0018,0015)*	*SINGLE_ VALUE*	*USER*		*C*	
…						
Instance Level						
…						
Private Attributes						
Private Creator	*(0009,0010)*	*SINGLE_ VALUE*	*FIXED*		*N*	
Private Value1	*(0009,1001)*	*UNIVERSAL*	*EMPTY*		*C*	
…						

[If <product> supports Extended Negotiation for Relational Queries, describe supported matching Attributes.]

[Describe scenarios in which the SCU can issue C-FIND-CANCEL requests, e.g.

The product issues C-FIND CANCEL requests in the following scenarios:
** Configurable maximum of matches detected*
** Initiated by user]*

[Also describe the behavior if the SCP ignores the cancellation request and continues sending responses.]

[Document your product's query capabilities and behavior for handling non-default character sets, especially for handling person names (VR of PN)]

A.5.2.7.2 SCU of the Patient Root Q/R Information Model – FIND SOP Class

[If this SOP Class is supported, fill in the section as indicated in Section A.5.2.7.1.]

A.5.2.7.3 SCU of the Study Root Q/R Information Model – MOVE SOP Class

[Describe if List of UID matching may be used to retrieve multiple entities at STUDY, SERIES, or IMAGES levels.]

[Also specify the conditions under which a C-MOVE CANCEL may be sent.]

[Indicate whether your product supports sending matching instances to a different AE Title.]

[Indicate your product behavior in case no C-STORE request is received after a specific time, e.g., <Product> expects to receive the C-STORE request in a configurable time frame after the C-MOVE request is sent. If no C-STORE requests are received within this configurable timeframe, it repeats the C-MOVE-Request.]

A.5.2.7.4 SCU of the Patient Root Q/R Information Model – MOVE SOP Class

[If this SOP Class is supported, fill in the section as indicated in Section A.5.2.7.3.]

A.5.2.7.5 SCP of the Study Root Q/R Information Model – FIND SOP Class

As a Service Class Provider of the Study Root Q/R - Information Model - FIND SOP Class, the <*Product*> uses the C-FIND-RSP to communicate matches back to the SCU. It supports the Matching Keys listed in Table A.5-18~~Table A.5-18~~ for hierarchical queries.

In the "Matching Type" column, the following Values can be used:

- SINGLE_VALUE: SCP can perform single Value matching on this Attribute.

- UID: SCP can perform List of UID matching on this Attribute.
- WILDCARD: SCP can perform Wildcard matching on this Attribute.
- RANGE: SCP can perform Range matching on this Attribute.
- SEQUENCE: SCP can perform sequence matching on this Attribute.
- UNIVERSAL: SCP can provide the Attribute in the C-FIND response (universal matching).

[The table below contains a set of Attributes (standard Attributes as well as private Attributes) that could be supported by a product. Add and remove Attributes in order to match your product implementation using the matching type as defined above. If multiple codes are supported, list all of them. Use the "Comments" column if clarification is needed.]

Table A.5-18: Supported C-FIND Attribute Matching for Study Root Q/R Model - SCP

Attribute Name	Tag	Matching Type	Comments
Study Level			
Study Date	(0008,0020)	*RANGE*	
Patient's Name	(0010,0010)	*WILDCARD*	
Patient ID	(0010,0020)	*SINGLE_ VALUE*	
Study Instance UID	(0020,000D)	*UNIVERSAL*	
Modalities in Study	(0008,0061)	*SINGLE_ VALUE*	
Study Description	(0008,1030)	*WILDCARD*	
…			
Series Level			
…			
Instance Level			
…			
Private Attributes			
…			

[If <product> supports Extended Negotiation for Relational Queries, describe supported matching Attributes.]

[Document your product behavior in case you are encountering non supported private Attributes.]

[Describe the behavior of the product if it receives a C-FIND-CANCEL request.]

[Document your product's query capabilities and behavior for handling non-default character sets, especially for handling person names (VR of PN).]

[If your product supports Extended Negotiation for fuzzy semantic matching of person names describe how matching is performed, e.g., whether your matching is insensitive to case, position, accent, or character encoding, or whether you support phonetic matching.]

A.5.2.7.6 SCP of the Patient Root Q/R Information Model – FIND SOP Class

[If this SOP Class is supported, fill in the section as indicated in Section A.5.2.7.5.]

A.5.2.7.7 SCP of the Study Root Q/R Information Model – MOVE SOP Class

As the SCP of the Study Root Q/R – Information Model –MOVE, the <*Product*> receives the C-MOVE-RQ and in turn uses the C-STORE-RQ sub operation to send matching SOP Instances to the Move Destination AE included in the C-MOVE-RQ.

[Provide a list of Storage SOP Classes supported or reference Storage Table in Overview e.g.]

As the SCP of the Storage Service Class, all Storage SOP Classes listed in Section A.1.1 are supported.

[Describe the relationship between the incoming C-MOVE request and the C-STORE suboperation, e.g., is each instance sent on one Association or is the same Association used for all instances, is this behavior configurable.]

[Describe your product behavior if a C-MOVE-CANCEL request is received.]

A.5.2.7.8 SCP of the Patient Root Q/R - Information Model – MOVE SOP Class

[If this SOP Class is supported, fill in the section as indicated in Section A.5.2.7.7.]

A.5.2.8 Print Management Service

A.5.2.8.1 SCU of the Basic Grayscale Print Management Meta SOP Class

The Basic Grayscale Print Management Meta SOP Class is composed of the mandatory SOP Classes listed in Table A.5-19~~Table A.5-19~~.

Table A.5-19: Basic Grayscale Print Management Meta SOP Classes - SCU

SOP Class Name	SOP Class UID
Basic Film Session	1.2.840.10008.5.1.1.1
Basic Film Box	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box	1.2.840.10008.5.1.1.4
Printer	1.2.840.10008.5.1.1.16

A.5.2.8.1.1 Basic Film Session SOP Class

Table A.5-20~~Table A.5-20~~ lists the supported DIMSE Services for the Basic Film Session SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported ones.]

Table A.5-20: Services for the Basic Film Session SOP Class - SCU

DIMSE Service Element	Purpose
N-CREATE	Create the Film Session
N-SET	*Update the Film Session*
N-DELETE	*Delete the Film Session*
N-ACTION	*Print all Film Boxes in the Film Session*

Table A.5-21~~Table A.5-21~~ lists the supported N-CREATE *and N-SET* Attributes for Basic Film Session:

[List the supported Attributes and their possible values / ranges. List the default Value when relevant. All tags are optional for the SCU in the Basic Film session. See example below.]

Table A.5-21: Supported N-CREATE *and* N-SET Attributes for the Basic Film Session SOP Class - SCU

Attribute Name	Tag	Values	Default
Number of Copies	*(2000,0010)*	*<range or fixed Value>*	*1*
Print Priority	*(2000,0020)*	*<<HIGH LOW MED>>*	*LOW*
Medium Type	*(2000,0030)*	*<<BLUE FILM CLEAR FILM MAMMO BLUE FILM MAMMO CLEAR FILM PAPER …>>*	

Attribute Name	Tag	Values	Default
Film Destination	*(2000,0040)*	*<<MAGAZINE PROCESSOR BIN_I …>>*	*PROCESSOR*
Film Session Label	*(2000,0050)*		
Memory Allocation	*(2000,0060)*		
Owner ID	*(2100,0160)*		

A.5.2.8.1.2 Basic Film Box SOP Class

Table A.5-22~~Table A.5-22~~ lists the supported DIMSE Services for the Basic Film Box SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported ones.]

Table A.5-22: Supported Services for the Basic Film Box SOP Classes

DIMSE Service Element	Purpose
N-CREATE	Create the Film Box in a previously created Film Session
N-ACTION	Print the Film Box
N-SET	*Update the Film Box*
N-DELETE	*Delete the Film Box*

Table A.5-23~~Table A.5-23~~ lists the supported N-CREATE and N-SET Attributes for Basic Film Box:

[List the supported Attributes and their possible Values. Provide the default Value when relevant. See example below.]

Table A.5-23: Supported N-CREATE and N-SET Attributes for the Basic Film Box SOP Class - SCU

Attribute Name	Tag	Values	Default
Image Display Format	(2010,0010)	*<<STANDARD\C,R ROW\R1,R2,R3, etc. COL\C1,C2,C3, etc. SLIDE SUPERSLIDE CUSTOM\i>>*	*STANDARD\1,1*
Annotation Display Format ID	*(2010,0030)*	*Possible Values to be provided by the printer manufacturer*	
Film Orientation	*(2010,0040)*	*<<PORTRAIT LANDSCAPE>>*	*PORTRAIT*
Film Size ID	*(2010,0050)*	*<<8INX10IN 8_5INX11IN 10INX12IN 11INX14IN 11INX17IN 14INX14IN 14INX17IN 24CMX24CM 24CMX30CM A4 A3 …>>*	

Attribute Name	Tag	Values	Default
Magnification Type	*(2010,0060)*	*<<REPLICATE BILINEAR CUBIC NONE …>>*	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	
Border Density	*(2010,0100)*	*<<BLACK WHITE i, where i represents the desired density in hundredths of OD …>>*	*BLACK*
Empty Image Density	*(2010,0110)*	*<<BLACK WHITE i, where i represents the desired density in hundredths of OD …>>*	*BLACK*
Minimum Density	*(2010,0120)*	*<possible Values or range in hundredths of OD>*	
Maximum Density	*(2010,0130)*	*<possible Values or range in hundredths of OD>*	*300*
Trim	*(2010,0140)*	*<<YES NO>>*	*NO*
Configuration Information	*(2010,0150)*		
Illumination	*(2010,015E)*	*<possible Values or range>*	*2000*
Reflective Ambient Light	*(2010,0160)*	*<possible Values or range>*	*10*
Ref. Film Session Seq.	(2010,0500)	*<possible Values or range>*	
>Ref. SOP Class UID	(0008,1150)	1.2.840.10008.5.1.1.1	
>Ref. SOP Instance UID	(0008,1155)		
Ref. Presentation LUT Seq.	*(2050,0500)*		
>Ref. SOP Class UID	*(0008,1150)*	*1.2.840.10008.5.1.1.23*	
>Ref. SOP Instance UID	*(0008,1155)*		

A.5.2.8.1.3 Basic Grayscale Image Box SOP Class

Table A.5-24~~Table A.5-24~~ lists the supported DIMSE Service for the Basic Grayscale Image Box SOP Class:

Table A.5-24: Services for the Basic Grayscale Image Box SOP Class

DIMSE Service Element	Purpose
N-SET	Set Image Attributes for a previously created Film Box

Table A.5-25~~Table A.5-25~~ lists the supported N-SET Attributes for Basic Grayscale Image Box:

[List the supported Attributes and their possible Values. Provide the default Value when relevant. See example below.]

Table A.5-25: Supported N-SET Attributes for the Basic Grayscale Image Box SOP Class -SCU

Attribute Name	Tag	Values	Default
Magnification Type	*(2010,0060)*	*<<REPLICATE BILINEAR CUBIC NONE …>>*	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	*143*
Minimum Density	*(2010,0120)*	*<possible Values or range in hundredths of OD>*	
Maximum Density	*(2010,0130)*	*<possible Values or range in hundredths of OD>*	*300*
Configuration Information	*(2010,0150)*		
Image Box Position	(2020,0010)	*<possible Position Values or range>*	
Polarity	*(2020,0020)*	*<<NORMAL REVERSE>>*	*NORMAL*
Requested Image Size	*(2020,0030)*	*width, x-dimension, in mm*	
Requested Decimate/Crop Behavior	*(2020,0040)*	*<<DECIMATE CROP FAIL>>*	
Basic Grayscale Image Sequence	(2020,0110)		
>Samples per Pixel	(0028,0002)	1	
>Photometric Interpretation	(0028,0004)	<<MONOCHROME1 MONOCHROME2>>	
>Rows	(0028,0010)		
>Columns	(0028,0011)		
>Pixel Aspect Ratio	*(0028,0034)*		*1\1*
>Bits Allocated	(0028,0100)	*<<8 16>>*	
>Bits Stored	(0028,0101)	*<<8 12>>*	
>High Bit	(0028,0102)	*<<7 11>>*	
>Pixel Representation	(0028,0103)	*0*	*0*
>Pixel Data	(7FE0,0010)		
Ref. Presentation LUT Seq.	*(2050,0500)*		
>Ref. SOP Class UID	*(0008,1150)*	*1.2.840.10008.5.1.1.23*	
>Ref. SOP Instance UID	*(0008,1155)*		

A.5.2.8.1.4 Printer SOP Class

Table A.5-26~~Table A.5-26~~ lists the supported DIMSE Services for the Printer SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported ones.]

Table A.5-26: Services for the Printer SOP Class

DIMSE Service Element	Purpose
N-EVENT-REPORT	Report the printer status in an asynchronous way
N-GET	*Retrieve printer information and status.*

An N-EVENT-REPORT request can be received by the SCU at any time during an Association.

Table A.5-27~~Table A.5-27~~ summarizes the behavior of the SCU when receiving Event Types within the N-EVENT-REPORT.

Table A.5-27: Printer SOP Class N-EVENT-REPORT Behavior

Event Type Name	Event Type ID	Behavior
Normal	1	
Warning	2	
Failure	3	

[Remove the following text and table if N-GET is not supported.]

Table A.5-28~~Table A.5-28~~ lists the supported N-GET Attributes for Printer SOP Class:

[List the supported Attributes and the behavior of the SCU when receiving Printer Status / Printer status info. Remove the non-supported Attributes from the table.]

Table A.5-28: Supported N-GET Attributes for the Printer SOP Class - SCU

Attribute Name	Tag	Behavior
Printer Status	(2110,0010)	*<<NORMAL WARNING FAILURE>>*
Printer Status Info	(2110,0020)	
Printer Name	*(2110,0030)*	
Manufacturer	*(0008,0070)*	
Manufacturer Model Name	*(0008,1090)*	
Device Serial Number	*(0018,1000)*	
Software Versions	*(0018,1020)*	
Date Last Calibration	*(0018,1200)*	
Time Last Calibration	*(0018,1201)*	

A.5.2.8.2 SCU of the Basic Color Print Management Meta SOP Class

The Basic Color Print Management Meta SOP Class is composed of the mandatory SOP Classes listed in Table A.5-29~~Table A.5-29~~:

Table A.5-29: Basic Color Print Management Meta SOP Classes

SOP Class Name	SOP Class UID
Basic Film Session	1.2.840.10008.5.1.1.1
Basic Film Box	1.2.840.10008.5.1.1.2
Basic Color Image Box	1.2.840.10008.5.1.1.4.1
Printer	1.2.840.10008.5.1.1.16

A.5.2.8.2.1 Basic Film Session SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class and the Film Session parameters are identical for color, see 'Basic Film Session SOP Class' for 'Basic Grayscale Print Management Meta SOP Class in Section A.5.2.8.1.1'. Otherwise, copy the Film Session table here and fill in the proper Values.]

A.5.2.8.2.2 Basic Film Box SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class and the Film Box parameters are identical for color, see 'Basic Film Box SOP Class' for 'Basic Grayscale Print Management Meta SOP Class' in Section A.5.2.8.1.2~~A.5.2.8.1.2~~. Otherwise copy the Film Box table here and fill in the proper Values.]

A.5.2.8.2.3 Basic Color Image Box SOP Class

Table A.5-30~~Table A.5-30~~ lists the supported DIMSE Service for the Basic Color Image Box SOP Class:

Table A.5-30:Services for the Basic Color Image Box SOP Class - SCU

DIMSE Service Element	Purpose
N-SET	Set each Image Attributes for a previously created Film Box

Table A.5-31~~Table A.5-31~~ lists the supported N-SET Attributes for Basic Color Image Box:

[List the supported Attributes and their possible Values. Provide the default Value when relevant. See example below.]

Table A.5-31: Supported N-SET Attributes for the Basic Color Image Box SOP Class - SCU

Attribute Name	Tag	Values	Default
Magnification Type	*(2010,0060)*	*<<REPLICATE BILINEAR CUBIC NONE …>>*	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	*143*
Image Box Position	(2020,0010)	*<possible Position Values or range>*	
Polarity	*(2020,0020)*	*<<NORMAL REVERSE>>*	*NORMAL*
Requested Image Size	*(2020,0030)*	*width, x-dimension, in mm*	
Requested Decimate/Crop Behavior	*(2020,0040)*	*<<DECIMATE CROP FAIL>>*	
Basic Color Image Sequence	(2020,0111)		
>Samples per Pixel	(0028,0002)	3	
>Photometric Interpretation	(0028,0004)	RGB	
>Planar Configuration	(0028,0006)	1 (frame interleave)	
>Rows	(0028,0010)		
>Columns	(0028,0011)		
>Pixel Aspect Ratio	(0028,0034)		*1\1*
>Bits Allocated	(0028,0100)	8	
>Bits Stored	(0028,0101)	8	
>High Bit	(0028,0102)	7	
>Pixel Representation	(0028,0103)	0	
>Pixel Data	(7FE0,0010)		

A.5.2.8.2.4 Printer SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class, see 'Printer SOP Class' for 'Basic Grayscale Print Management Meta SOP Class' in Section A.5.2.8.1.4. Otherwise copy the Printer SOP Class table here and fill in the proper Values.]

A.5.2.8.3 SCU of the Basic Annotation Box SOP Class

Table A.5-32~~Table A.5-32~~ lists the supported DIMSE Service for the Basic Annotation Box SOP Class:

Table A.5-32: Services for the Basic Annotation Box SOP Class – SCU

DIMSE Service Element	Purpose

N-SET	Set each image Attributes for a previously created Film Box

Table A.5-33~~Table A.5-33~~ lists the supported N-SET Attributes for the Basic Annotation Box SOP Class:

[List the supported Attributes and their possible Values. Provide the default Value when relevant. See example below.]

Table A.5-33: Supported N-SET Attributes for the Basic Annotation Box SOP Class-SCU

Attribute Name	Tag	Values	Default
Annotation Position	(2030,0010)	*1 to 6*	
Text string	*(2030,0020)*	*Free text*	

A.5.2.8.4 SCU of the Print Job SOP Class

Table A.5-34~~Table A.5-34~~ lists the supported DIMSE Services for the Print Job SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported one.]

Table A.5-34: Services for the Print Job SOP Class - SCU

DIMSE Service Element	Purpose
N-EVENT-REPORT	Report the printer status in an asynchronous way
N-GET	*Retrieve printer information and status.*

An N-EVENT-REPORT request can be received by the SCU at any time during an Association if the Print Job SOP Class has been negotiated by the SCU.

Table A.5-35~~Table A.5-35~~ summarizes the behavior of the SCU when receiving Event Types within the N-EVENT-REPORT.

Table A.5-35: Print Job SOP Class N-EVENT-REPORT Behavior

Event Type Name	Event Type ID	Behavior
Pending	1	
Printing	2	
Done	3	
Failure	4	

[Remove the following text and table if N-GET is not supported.]

Table A.5-36~~Table A.5-36~~ lists the supported N-GET Attributes for Print Job SOP Class:

[List the supported Attributes and the behavior of the SCU when receiving Execution Status / Execution Status Info. Remove the non-supported Attributes from the table.]

Table A.5-36: Supported N-GET Attributes for the Print Job SOP Class - SCU

Attribute Name	Tag	Behavior
Print Priority	(2000,0020)	
Execution Status	*(2100,0020)*	*<<PENDING PRINTING DONE FAILURE>>*
Execution Status Info	*(2100,0030)*	
Creation Date	*(2100,0040)*	
Creation Time	*(2100,0050)*	

Originator	*(2100,0070)*	
Printer Name	*(2110,0030)*	

A.5.2.8.5 SCU of the Presentation LUT SOP Class

Table A.5-37~~Table A.5-37~~ lists the supported DIMSE Services for the Presentation LUT SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported one.]

Table A.5-37: Services for the Presentation LUT SOP Class - SCU

DIMSE Service Element	Purpose
N-CREATE	Create the Presentation LUT Instance
N-DELETE	*Delete the Presentation LUT Instance*

Table A.5-38~~Table A.5-38~~ lists the supported N-CREATE Attributes for Presentation LUT:

[List the supported Attributes. Either Presentation LUT Sequence or Presentation LUT Shape must be present (not both).]

Table A.5-38: Supported N-CREATE Attributes for the Presentation LUT SOP Class-SCU

Attribute Name	Tag	Values	Default
Presentation LUT sequence	*(2050,0010)*		
> LUT Descriptor	*(0028,3002)*		
> LUT Explanation	*(0028,3003)*		
> LUT Data	*(0028,3006)*		
Presentation LUT Shape	*(2050,0020)*	*<<IDENTITY LIN OD>>*	

A.5.2.8.6 SCU of the Printer Configuration Retrieval SOP Class

Table A.5-39~~Table A.5-39~~ lists the supported DIMSE for the Printer Configuration Retrieval SOP Class:

Table A.5-39: Services for the Printer Configuration Retrieval SOP Class - SCU

DIMSE Service Element	Purpose
N-GET	Retrieve printer configuration.

A.5.2.8.7 SCP of the Basic Grayscale Print Management Meta SOP Class

The Basic Grayscale Print Management Meta SOP Class is composed of the mandatory SOP Classes listed in Table A.5-40~~Table A.5-40~~:

Table A.5-40: Basic Grayscale Print Management Meta SOP Classes - SCP

SOP Class Name	SOP Class UID
Basic Film Session	1.2.840.10008.5.1.1.1
Basic Film Box	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box	1.2.840.10008.5.1.1.4
Printer	1.2.840.10008.5.1.1.16

A.5.2.8.7.1 Basic Film Session SOP Class

Table A.5-41~~Table A.5-41~~ lists the supported DIMSE Services for the Basic Film Session SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported one.]

Table A.5-41: Services for the Basic Film Session SOP Class - SCP

DIMSE Service Element	Purpose
N-CREATE	Create the Film Session
N-SET	Update the Film Session
N-DELETE	Delete the Film Session
N-ACTION	*Print all Film Boxes in the Film Session*

Table A.5-42~~Table A.5-42~~ lists the supported N-CREATE and N-SET Attributes for Basic Film Session:

[List the supported Attributes and their possible values/ranges. Indicate the default Value when relevant. See example below.]

Table A.5-42 - Supported N-CREATE and N-SET Attributes for Basic Film Session - SCP

Attribute Name	Tag	Values	Default
Number of Copies	(2000,0010)	<range or fixed Value>	1
Print Priority	(2000,0020)	*<<HIGH* *LOW* *MED>>*	*LOW*
Medium Type	(2000,0030)	*<<BLUE FILM* *CLEAR FILM* *MAMMO BLUE FILM* *MAMMO CLEAR FILM* *PAPER* *…>>*	
Film Destination	(2000,0040)	*<<MAGAZINE* *PROCESSOR* *BIN_I* *…>>*	*PROCESSOR*
Film Session Label	*(2000,0050)*		
Memory Allocation	*(2000,0060)*		
Owner ID	*(2100,0160)*		

[If the SCP supports N-ACTION for the Film Session SOP Class, then the SCP must specify the maximum number of collated films.]

A.5.2.8.7.2 Basic Film Box SOP Class

Table A.5-43~~Table A.5-43~~ lists the supported DIMSE Services for the Basic Film Box SOP Class:

[List the supported DIMSE Service Elements. Remove the non-supported one.]

Table A.5-43: Services Supported for the Basic Film Box SOP Class - SCP

DIMSE Service Element	Purpose
N-CREATE	Create the Film Box in a previously created Film Session
N-ACTION	Print the Film Box
N-DELETE	Delete the Film Box
N-SET	*Update the Film Box*

Table A.5-42~~Table A.5-42~~ lists the supported N-CREATE and N-SET Attributes for Basic Film Box:

[List the supported Attributes and their possible Values. Indicate the default Value when relevant. See example below.]

Table A.5-44: Supported N-CREATE and N-SET Attributes for Basic Film Box - SCP

Attribute Name	Tag	Values	Default
Image Display Format	(2010,0010)	<<STANDARD\C,R ROW\R1,R2,R3, etc. COL\C1,C2,C3, etc. SLIDE SUPERSLIDE CUSTOM\i>>	*STANDARD\1,1*
Annotation Display Format ID	(2010,0030)	*<Possible Values>*	
Film Orientation	(2010,0040)	<<PORTRAIT LANDSCAPE>>	*PORTRAIT*
Film Size ID	(2010,0050)	<<8INX10IN 8_5INX11IN 10INX12IN 11INX14IN 11INX17IN 14INX14IN 14INX17IN 24CMX24CM 24CMX30CM A4 A3 …>>	
Magnification Type	(2010,0060)	<<REPLICATE BILINEAR CUBIC NONE …>>	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	*143*
Border Density	*(2010,0100)*	*<<BLACK* *WHITE* *i, where i represents the desired density in hundredths of OD* *…>>*	*BLACK*
Empty Image Density	*(2010,0110)*	*<<BLACK* *WHITE* *i, where i represents the desired density in hundredths of OD* *…>>*	*BLACK*
Minimum Density	*(2010,0120)*	*<possible Values or range in hundredths of OD>*	
Maximum Density	(2010,0130)	<possible Values or range in hundredths of OD>	*320*
Trim	*(2010,0140)*	*<<YES* *NO>>*	*NO*
Configuration Information	*(2010,0150)*		
Illumination	*(2010,015E)*	*<possible Values or range>*	*2000*
Reflective Ambient Light	*(2010,0160)*	*<possible Values or range>*	*10*
Referenced Film Session Sequence.	(2010,0500)		
> Referenced SOP Class UID	(0008,1150)	1.2.840.10008.5.1.1.1	
> Referenced SOP Instance UID	(0008,1155)		
Referenced. Image Box Sequence	(2010,0510)	Provided in the N-CREATE-RSP	
> Referenced SOP Class UID	(0008,1150)	1.2.840.10008.5.1.1.4	
> Referenced SOP Instance UID	(0008,1155)		

Attribute Name	Tag	Values	Default
Referenced Annotation Box Sequence	*(2010,0520)*		
> Referenced. SOP Class UID	*(0008,1150)*	*1.2.840.10008.5.1.1.15*	
> Referenced SOP Instance UID	*(0008,1155)*		
Referenced Presentation LUT Sequence	*(2050,0500)*		
> Referenced SOP Class UID	*(0008,1150)*	*1.2.840.10008.5.1.1.23*	
> Referenced SOP Instance UID	*(0008,1155)*		

[Describe each supported custom Image Display Format (2010,0010) and provide details such as position and dimensions of each composing Image Box, including the numbering scheme of the image positions.]

[Describe each supported Annotation Display Format ID (2010,0030) (e.g., position and dimensions of annotation box, font, number of characters).]

[Describe supported configuration information (e.g., identification, content).]

A.5.2.8.7.3 Basic Grayscale Image Box SOP Class

Table A.5-45~~Table A.5-45~~ lists the supported DIMSE Service for the Basic Grayscale Image Box SOP Class:

Table A.5-45: Services for the Basic Grayscale Image Box SOP Class- SCP

DIMSE Service Element	Purpose
N-SET	Set each Image Attributes for a previously created Film Box

Table A.5-46~~Table A.5-46~~ lists the supported N-SET Attributes for Basic Grayscale Image Box:

[List the supported Attributes and their possible Values. Indicate the default Value when relevant. See example below.]

Table A.5-46: Supported N-SET Attributes for Basic Grayscale Image Box - SCP

Attribute name	Tag	Values	Default
Magnification Type	*(2010,0060)*	*<<REPLICATE BILINEAR CUBIC NONE …>>*	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	*143*
Minimum Density	*(2010,0120)*	*<possible Values or range in hundredths of OD>*	
Maximum Density	*(2010,0130)*	*<possible Values or range in hundredths of OD>*	*320*
Configuration Information	*(2010,0150)*		
Image Box Position	(2020,0010)	*<possible Position Values or range>*	
Polarity	(2020,0020)	*<<NORMAL REVERSE>>*	*NORMAL*
Requested Image Size	*(2020,0030)*	*width, x-dimension, in mm*	
Requested Decimate/Crop Behavior	*(2020,0040)*	*<<DECIMATE CROP FAIL>>*	

Attribute name	Tag	Values	Default
Basic Grayscale Image Sequence	(2020,0110)		
>Samples per Pixel	(0028,0002)	*1*	
>Photometric Interpretation	(0028,0004)	*<<MONOCHROME1 MONOCHROME2>>*	
>Rows	(0028,0010)		
>Columns	(0028,0011)		
>Pixel Aspect Ratio	*(0028,0034)*		*1\1*
>Bits Allocated	(0028,0100)	*<<8 16>>*	
>Bits Stored	(0028,0101)	*<<8 12>>*	
>High Bit	(0028,0102)	*<<7 11>>*	
>Pixel Representation	(0028,0103)	*0*	*0*
>Pixel Data	(7FE0,0010)		
Referenced. Presentation LUT Sequence	*(2050,0500)*		
>Referenced. SOP Class UID	*(0008,1150)*	*1.2.840.10008.5.1.1.23*	
>Referenced. SOP Instance UID	*(0008,1155)*		

[If cropping or decimating of images is supported, describe the algorithm for removing rows and columns from the image.]

A.5.2.8.7.4 Printer SOP Class

Table A.5-47~~Table A.5-47~~ lists the supported DIMSE Services for the Printer SOP Class:

Table A.5-47: Services for the Printer SOP Class - SCP

DIMSE Service Element	Purpose
N-EVENT-REPORT	Report the printer status in an asynchronous way
N-GET	Retrieve printer information and status.

Table A.5-48~~Table A.5-48~~ lists the Printer SOP Class N-EVENT-REPORT Behavior:

Table A.5-48: Printer SOP Class N-EVENT-REPORT Behavior

Event Type Name	Event Type ID	Attribute Name	Tag	Values
Normal	1	N/A		
Warning	2	Printer Status info	(2110,0020)	*[Indicate the possible Values supported by the printer out of the defined terms table see PS 3.3 Section C.13.9.1 for Defined Terms when the Printer Status is equal to WARNING or FAILURE]*
		Film Destination	*(2000,0040)*	
		Printer Name	*(2110,0030)*	

Failure	3	Printer Status info	(2110,0020)	*[Indicate the possible Values supported by the printer out of the defined terms Table See PS 3.3 Section C.13.9.1 for Defined Terms when the Printer Status is equal to WARNING or FAILURE]*
		Film Destination	*(2000,0040)*	
		Printer Name	*(2110,0030)*	

Table A.5-49~~Table A.5-49~~ lists the supported N-GET Attributes for Printer SOP Class:

[List the supported Attributes. Remove the non-supported Attributes from the Table]

Table A.5-49: Supported N-GET Attributes for the Printer SOP Class - SCP

Attribute Name	Tag	Values
Printer Status	(2110,0010)	*<<NORMAL WARNING FAILURE>>*
Printer Status Info	(2110,0020)	*[Indicate the possible Values supported by the printer out of the defined terms table See PS 3.3 Section C.13.9.1 for Defined Terms when the Printer Status is equal to WARNING or FAILURE]*
Printer Name	*(2110,0030)*	
Manufacturer	*(0008,0070)*	
Manufacturer Model Name	*(0008,1090)*	
Device Serial Number	*(0018,1000)*	
Software Versions	*(0018,1020)*	
Date Last Calibration	*(0018,1200)*	
Time Last Calibration	*(0018,1201)*	

A.5.2.8.8 SCP of the Basic Color Print Management Meta SOP Class

The Basic Color Print Management Meta SOP Class is composed of the mandatory SOP Classes listed in Table A.5-50~~Table A.5-50~~:

Table A.5-50: Basic Color Print Management Meta OP Classes - SCP

SOP Class Name	SOP Class UID
Basic Film Session	1.2.840.10008.5.1.1.1
Basic Film Box	1.2.840.10008.5.1.1.2
Basic Color Image Box	1.2.840.10008.5.1.1.4.1
Printer	1.2.840.10008.5.1.1.16

A.5.2.8.8.1 Basic Film Session SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class and the Film Session parameters are identical for color, see 'Basic Film Session SOP Class' for 'Basic Grayscale Print Management Meta SOP Class' in Section A.5.2.8.7.1. Otherwise copy the Film session table here and fill in the proper Values.]

A.5.2.8.8.2 Basic Film Box SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class and the Film Box parameters are identical for color, see 'Basic Film Box SOP Class' for 'Basic Grayscale Print Management Meta SOP Class' in Section A.5.2.8.7.2. Otherwise copy the Film Box Table here and fill in the proper Values.]

A.5.2.8.8.3 Basic Color Image Box SOP Class

Table A.5-51~~Table A.5-51~~ lists the supported DIMSE Service for the Basic Color Image Box SOP Class:

Table A.5-51: Services for the Basic Color Image Box SOP Class - SCP

DIMSE Service Element	Purpose
N-SET	Set each Image Attributes for a previously created Film Box

Table A.5-52~~Table A.5-52~~ lists the supported N-SET Attributes for Basic Color Image Box:

[List the supported Attributes and their possible Values. Indicate the default Value when relevant. See example below.]

Table A.5-52: Supported N-SET Attributes for Basic Color Image Box – SCP

Attribute Name	Tag	Values	Default
Magnification Type	*(2010,0060)*	*<<REPLICATE BILINEAR CUBIC NONE …>>*	*CUBIC*
Smoothing Type	*(2010,0080)*	*<possible Values or range>*	*143*
Image Box Position	(2020,0010)	*<possible Position Values or range>*	
Polarity	(2020,0020)	*<<NORMAL REVERSE>>*	*NORMAL*
Requested Image Size	*(2020,0030)*	*width, x-dimension, in mm*	
Requested Decimate/Crop Behavior	*(2020,0040)*	*<<DECIMATE CROP FAIL>>*	
Basic Color Image Sequence	(2020,0111)		
>Samples per Pixel	(0028,0002)	3	
>Photometric Interpretation	(0028,0004)	RGB	
>Planar Configuration	(0028,0006)	1 (frame interleaves)	
>Rows	(0028,0010)		
>Columns	(0028,0011)		
>Pixel Aspect Ratio	(0028,0034)		*1\1*
>Bits Allocated	(0028,0100)	8	
>Bits Stored	(0028,0101)	8	
>High Bit	(0028,0102)	7	
>Pixel Representation	(0028,0103)	0	
>Pixel Data	(7FE0,0010)		

[In case your printer is a grayscale printer that supports printing of color images (e.g. it supports the Basic Color Print Management Meta SOP Class), describe the behavior when printing color images.]

A.5.2.8.8.4 Printer SOP Class

[If your system also supports the Basic Grayscale Print Management Meta SOP Class, see 'Printer SOP Class' for 'Basic Grayscale Print Management Meta SOP Class' in Section A.5.2.8.7.4. Otherwise copy the Printer SOP Class Table here and fill in the proper Values.]

A.5.2.8.9 SCP of the Basic Annotation Box SOP Class

Table A.5-53~~Table A.5-53~~ lists the supported DIMSE Service for the Basic Annotation Box SOP Class:

Table A.5-53: Services for the Basic Annotation Box SOP Class - SCP

DIMSE Service Element	Purpose
N-SET	Set each Image Attributes for a previously created film box

Table A.5-54~~Table A.5-54~~ lists the supported N-SET Attributes for Basic Annotation Box SOP Class:

[List the supported Attributes and their possible Values. Indicate the default Value when relevant. See example below.]

Table A.5-54: Supported N-SET Attributes for Basic Annotation Box SOP Class - SCP

Attribute Name	Tag	Values	Default
Annotation Position	(2030,0010)		
Text string	(2030,0020)	*Free text*	

A.5.2.8.10 SCP of the Print Job SOP Class

Table A.5-55~~Table A.5-55~~ lists the supported DIMSE Services for the Print Job SOP Class:

Table A.5-55: Services for the Print Job SOP Class - SCP

DIMSE Service Element	Purpose
N-EVENT-REPORT	Report the printer status in an asynchronous way
N-GET	Retrieve printer information and status.

An N-EVENT-REPORT request can be sent by the SCP at any time during an Association if the print Job SOP Class has been negotiated by the SCU.

Table A.5-56~~Table A.5-56~~ lists the supported Event Types and Attributes within the N-EVENT-REPORT.

Table A.5-56: Print Job SOP Class N-EVENT-REPORT- SCP

Event Type name	Event Type ID	Attribute Name	Tag	Values
Pending	1	Execution Status Info	(2100,0030)	*[Indicate the possible Values supported by the printer out of the Defined Terms Table See PS 3.3 Section C.13.9.1 for Defined Terms when the Execution Status info is PENDING or FAILURE]*
		Film Session Label	*(2000,0050)*	
		Printer Name	*(2110,0030)*	
Printing	2	Execution Status Info	(2100,0030)	NORMAL
		Film Session Label	*(2000,0050)*	
		Printer Name	*(2110,0030)*	
Done	3	Execution Status Info	(2100,0030)	NORMAL
		Film Session Label	*(2000,0050)*	
		Printer Name	*(2110,0030)*	
Failure	4	Execution Status Info	(2100,0030)	*[Indicate the possible Values supported by the printer out of the Defined Terms Table See PS 3.3 Section C.13.9.1 for Defined Terms when the Execution Status info is PENDING or FAILURE]*

		Film Session Label	*(2000,0050)*	
		Printer Name	*(2110,0030)*	

[Remove the complete table if N-GET is not supported.]

Table A.5-57~~Table A.5-57~~ lists the supported N-GET Attributes for Print Job SOP Class:

[List the supported Attributes and the supported Values when relevant. Remove the non-supported Attributes from the table.]

Table A.5-57: Supported N-GET Attributes for the Print Job SOP Class - SCP

Attribute Name	Tag	Values
Print Priority	(2000,0020)	*<<HIGH MEDIUM LOW>>*
Execution Status	(2100,0020)	*<<PENDING PRINTING DONE FAILURE>>*
Execution Status Info	(2100,0030)	*[Indicate the possible Values supported by the printer out of the Defined Terms Table. See PS3.3 Section C.13.9.1 for Defined Terms when the Execution Status info is PENDING or FAILURE]*
Creation Date	*(2100,0040)*	
Creation Time	*(2100,0050)*	
Originator	*(2100,0070)*	
Printer Name	*(2110,0030)*	

A.5.2.8.11 SCP of the Presentation LUT SOP Class

Table A.5-58~~Table A.5-58~~ lists the supported DIMSE Services for the Presentation LUT SOP Class:

Table A.5-58: Services for the Presentation LUT SOP Class SCP

DIMSE Service Element	Purpose
N-CREATE	Create the Presentation LUT Instance
N-DELETE	Delete the Presentation LUT Instance

Table A.5-59~~Table A.5-59~~ lists the supported N-CREATE Attributes for Presentation LUT:

[List the supported Attributes in the table below.]

Table A.5-59: Supported N-CREATE Attributes for Presentation LUT - SCP

Attribute Name	Tag	Values	Default
Presentation LUT Sequence	(2050,0010)		
>LUT Descriptor	(0028,3002)		
>LUT Explanation	*(0028,3003)*		
>LUT Data	*(0028,3006)*		
Presentation LUT Shape	(2050,0020)	*<<IDENTITY LIN OD>>*	

A.5.2.8.12 SCP of the Printer Configuration Retrieval SOP Class

Table A.5-60~~Table A.5-60~~ lists the supported DIMSE Services for the Printer Configuration Retrieval SOP Class:

Table A.5-60: Services for the Printer Configuration Retrieval SOP Class

DIMSE Service Element	Purpose
N-GET	Retrieve printer configuration.

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A.5.3 Supported DICOM Web Services

A.5.3.1 URI Web Service (WADO URI)

This section provides details regarding the URI Web Service. For an overview of the supported transactions see Table A.1-8 URI Service~~Table A.1-8 URI Service~~.

A.5.3.1.1 Supported Web Media Types

A.5.3.1.1.1 DICOM Media Types

The supported DICOM Storage SOP Classes / Transfer Syntaxes are listed in Section A.1.1 of this document.

[Provide requirements for display and processing of instances received via Web Services. This could either be done by referencing section A.5.2.5.2 if the same requirements apply, or by copying the tables from Section A.5.2.5.2 and filling them appropriately, if the requirements for Web Services differ.]

A.5.3.1.1.2 Rendered Media Types

Table A.5-61~~Table A.5-61~~ lists the supported rendered Media types depending on the Media Type category.

[Indicate which category / Media types are supported by your system by marking the cells with Y or N. Remove rows for Media Types neither supported as user agent nor as Origin Server].

Table A.5-61: Supported Rendered Media Types

Category	Media Type	URI User Agent	URI Origin Server
Single Frame Image	image/jpeg		
	image/gif		
	image/png		
	image/jp2		
Multi-Frame Image	*image/gif*		
Video	*video/mpeg*		
	video/mp4		
	video/H265		
Text	text/html		
	text/plain		
	text/xml		
	text/rtf		
	application/pdf		

A.5.3.1.2 Retrieve DICOM Instance Transaction - URI Web Service

[Provide requirements for display and processing of instances retrieved via URI Web Service. This could either be done by referencing Section A.5.2.5.2 (as indicated below), if the same requirements apply, or by copying the tables from Section A.5.2.5.2 and filling them appropriately if requirements for retrieved instances differ.]

In order to display or process DICOM instances retrieved via URI Web Service, see Section A.5.2.5.2.

A.5.3.1.2.1 User Agent

The URI Web Service user agent supports the Query Parameters listed in Table A.5-62~~Table A.5-62~~.

[List the supported parameters and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-62: Query Parameters for Retrieve DICOM Instance URI Web Service - User Agent

Query Parameter	Supported Values	Comments
requestType	WADO	
studyUID	<Study Instance UID>	

Query Parameter	Supported Values	Comments
seriesUID	<Series Instance UID>	
objectUID	<SOP Instance UID>	
contentType	application/dicom	*[Must be compatible with the acceptable Media Types in the HTTP Header]* See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "UA" column
charset	*<<UTF-8* *ISO-8859-1* *…>>*	
anonymize	yes	
transferSyntax		

The URI Web Service User Agent supports the Header Fields listed in Table A.5-63~~Table A.5-63~~:

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-63: Header Fields for Retrieve DICOM Instance URI Web Service - User Agent

Header Field	Supported Values	Comments
Accept	application/dicom	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "UA" column
Accept-charset	*<<UTF-8* *ISO-8859-1* *…>>*	

A.5.3.1.2.2 Origin Server

The URI Web Service origin server receives GET requests for studies, series and instances containing query parameters and headers fields. Supported Values are listed in the query parameters and header fields tables (Table A.5-64~~Table A.5-64~~ and Table A.5-65~~Table A.5-65~~).

The URI is composed by a Base URI: See Section 7.8A.6.3.1~~A.6.3.1~~ for the Base URI of the Origin Server.

The URI Web Service origin server supports the Query Parameters listed in Table A.5-64~~Table A.5-64~~.

[List the supported parameters and their Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-64: Query Parameters for Retrieve DICOM Instance URI Web Service - Origin Server

Query Parameter	Supported Values	Comments
requestType	WADO	
studyUID	<Study Instance UID>	
seriesUID	<Series Instance UID>	
objectUID	<SOP Instance ID>	
contentType	application/dicom	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "OS" column
charset	*<<UTF-8* *ISO-8859-1* *…>>*	
anonymize		

Query Parameter	Supported Values	Comments
transferSyntax		

The URI Web Service origin server supports the Header Fields listed in Table A.5-65~~Table A.5-65~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-65: Header Fields for Retrieve DICOM Instance URI Web Service - Origin Server

Header Field	Supported Values	Comments
Accept	application/dicom	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "OS" column
Accept-charset	*<<UTF-8* *ISO-8859-1* *…>>*	

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A.5.3.1.3 Retrieve Rendered Instance Transaction - URI Web Service

Provide requirements for display and processing of instances retrieved via URI Web Service. This could either be done by referencing section 5.2.5.2 (as indicated below), if the same requirements apply, or by copying the tables from Section 5.2.5.2 and filling them appropriately if requirements for retrieved instances differ.]

To display or process DICOM instances retrieved via URI Web Service, see Section A.5.2.5.2.

A.5.3.1.3.1 User Agent

The URI Web Service user agent supports the Query Parameters listed in Table A.5-66~~Table A.5-66~~.

[List the supported parameters and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-66: Query Parameters for Retrieve Rendered Instance URI Web Service - User Agent

Query Parameter	Supported Values	Comments
requestType	WADO	
studyUID	<Study Instance UID>	
seriesUID	<Series Instance UID>	
objectUID	<SOP Instance UID>	
contentType	<<image/jpeg image/gif image/png image/jp2 video/mpeg video/mp4 video/H265 text/html text/plain>>	See Section A.5.3.1.1.2 Rendered Media Type for details
charset	*<<UTF-8* *ISO-8859-1* *…>>*	
annotation		
rows		
columns		
region		
windowCenter		
windowWidth		
frameNumber		

Query Parameter	Supported Values	Comments
imageQuality		*[The Value must be between 1 and 100. 1 means low quality and 100 imeans high quality]*
presentationUID and presentationSeriesUID		*[if presentationUID specified then presentationSeriesUID must be present.]*

The URI Web Service user agent supports Header Fields listed in Table A.5-67~~Table A.5-67~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-67: Header Fields for Retrieve Rendered Instance URI Web Service - User Agent

Header Field	Supported Values	Comments
Accept	<<image/jpeg *image/gif* *image/png* *image/jp2* *video/mpeg* *video/mp4* *video/H265* text/html text/plain>>	See Section A.5.3.1.1.2 Rendered Media Type for details
Accept-charset	*<<UTF-8* *ISO-8859-1* *…>>*	

A.5.3.1.3.2 Origin Server

The URI Web Service origin server receives GET requests for studies, series and instances containing query parameters and headers fields. Supported Values are listed in the query parameters and header fields tables (Table A.5-68~~Table A.5-68~~ and Table A.5-69~~Table A.5-69~~).

The URI is composed by a Base URI: See Section 7.8A.6.3.1~~A.6.3.1~~ for the Base URI of the origin server.

The URI Web Service origin server supports Query Parameters listed in Table A.5-68~~Table A.5-68~~.

[List the supported parameters and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-68: Query Parameters for Retrieve Rendered Instance URI Web Service - Origin Server

Query Parameter	Supported Values	Comments
requestType	WADO	
studyUID	<Study Instance UID>	
seriesUID	<Series Instance UID>	
objectUID	<SOP Instance ID>	
contentType	<<image/jpeg *image/gif* *imag/png* *image/jp2* *video/mpeg* *video/mp4* *video/H265* text/html text/plain**>>**	See details in Section A.5.3.1.1.2 Rendered Media Types
charset	*<<UTF-8* *ISO-8859-1*	

Query Parameter	Supported Values	Comments
	…>>	
annotation	<<patient technique>> *Add additionally supported key word Values here*	
rows		
columns		
region		
windowCenter		
windowWidth		
frameNumber		
imageQuality		*[The Value must be between 1 and 100.* *1 means low quality and 100 imeans high quality.]*
presentationUID and presentationSeriesUID		*[if presentationUID specified then presentationSeriesUID must be present.]*

The URI Web Service origin server supports Header Fields listed in Table A.5-69~~Table A.5-69~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-69: Header Fields for Retrieve Rendered Instance URI Web Service - Origin Server

Header Field	Supported Values	Comments
Accept	<<Image/jpeg *image/gif* *image/png* *image/jp2* *video/mpeg* *video/mp4* *video/H265* text/html text/plain>>	See details in Section A.5.3.1.1.2 Rendered Media Types

A.5.3.2 Studies Web Service

This section provides details regarding the Studies Web Service. For an overview of supported transactions and resources see Table A.1-9 Study Service~~Table A.1-9 Study Service~~.

A.5.3.2.1 Supported Web Media Types

A.5.3.2.1.1 DICOM Media Types

The supported DICOM Storage SOP Classes / Transfer Syntaxes are listed in Section 1.1 of this document.

[Provide requirements for display and processing of instances received via Web Services. This could either be done by referencing section A.5.2.5.2 if the same requirements apply, or by copying the tables from Section A.5.2.5.2 and filling them appropriately, if requirements for Web Services differ.]

A.5.3.2.1.2 DICOM Bulkdata Media Type

Indicate in the Table the combination media type / Transfer Syntaxes supported by your user agent and / or origin server for each category. Remove the unsupported Media Types. X represents the default Transfer Syntaxes to be supported for each category.]

Uncompressed Bulkdata is transferred using Explicit VR Little Endian Transfer Syntax.

Table A.5-70~~Table A.5-70~~ lists the supported Media Types and Transfer Syntax UIDs for Compressed Bulkdata.

Table A.5-70: DICOM Compressed Bulkdata Media Types

Category	Media Type	Transfer Syntax UID	Transfer Syntax Name	User Agent	Origin Server
Single Frame Image	image/jpeg	1.2.840.10008.1.2.4.70	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 Selection Value 1): Default Transfer Syntax for Lossless JPEG Image Compression		
		1.2.840.10008.1.2.4.50	*JPEG Baseline (Process 1): Default Transfer Syntax for Lossy JPEG 8 Bit Image Compression*		
		1.2.840.10008.1.2.4.51	*JPEG Extended (Process 2 & 4): Default Transfer Syntax for Lossy JPEG 12 Bit Image Compression (Process 4 only)*		
		1.2.840.10008.1.2.4.57	*JPEG Lossless, Non-Hierarchical (Process 14)*		
	image/x-dicom-rle	1.2.840.10008.1.2.5	RLE Lossless		
	image/x-jls	1.2.840.10008.1.2.4.80	JPEG-LS Lossless Image Compression		
		1.2.840.10008.1.2.4.81	*JPEG-LS Lossy (Near-Lossless) Image Compression*		
	image/jp2	1.2.840.10008.1.2.4.90	JPEG 2000 Image Compression (Lossless Only)		
		1.2.840.10008.1.2.4.91	*JPEG 2000 Image Compression*		
	image/jpx	1.2.840.10008.1.2.4.92	JPEG 2000 Part 2 Multi-component Image Compression (Lossless Only)		
		1.2.840.10008.1.2.4.93	*JPEG 2000 Part 2 Multi-component Image Compression*		
Multi-Frame Image	image/jpeg	1.2.840.10008.1.2.4.70	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 Selection Value 1): Default Transfer Syntax for Lossless JPEG Image Compression		
		1.2.840.10008.1.2.4.50	*JPEG Baseline (Process 1): Default Transfer Syntax for Lossy JPEG 8 Bit Image Compression*		
		1.2.840.10008.1.2.4.51	*JPEG Extended (Process 2 & 4): Default Transfer Syntax for Lossy JPEG 12 Bit Image Compression (Process 4 only)*		
		1.2.840.10008.1.2.4.57	*JPEG Lossless, Non-Hierarchical (Process 14)*		
	image/x-dicom-rle	1.2.840.10008.1.2.5	RLE Lossless		
	image/x-jls	1.2.840.10008.1.2.4.80	JPEG-LS Lossless Image Compression		
		1.2.840.10008.1.2.4.81	*JPEG-LS Lossy (Near-Lossless) Image Compression*		
	image/jp2	1.2.840.10008.1.2.4.90	JPEG 2000 Image Compression (Lossless Only)		
		1.2.840.10008.1.2.4.91	*JPEG 2000 Image Compression*		

	image/jpx	1.2.840.10008.1.2.4.92	JPEG 2000 Part 2 Multi-component Image Compression (Lossless Only)		
		1.2.840.10008.1.2.4.93	*JPEG 2000 Part 2 Multi-component Image Compression*		
Video	video/mpeg2	*1.2.840.10008.1.2.4.100*	*MPEG2 Main Profile @ Main Level*		
		1.2.840.10008.1.2.4.101	MPEG2 Main Profile @ High Level		
	video/mp4	1.2.840.10008.1.2.4.102	MPEG-4 AVC/H.264 High Profile / Level 4.1		
		1.2.840.10008.1.2.4.103	*MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1*		
		1.2.840.10008.1.2.4.104	*MPEG-4 AVC/H.264 High Profile / Level 4.2 For 2D Video*		
		1.2.840.10008.1.2.4.105	*MPEG-4 AVC/H.264 High Profile / Level 4.2 For 3D Video*		
		1.2.840.10008.1.2.4.106	*MPEG-4 AVC/H.264 Stereo High Profile / Level 4.2*		

A.5.3.2.1.3 Supported Rendered Media Types

Table A.5-71~~Table A.5-71~~ lists the supported Rendered Media types for each Media Type category.

[Indicate which category / Media types are supported by your system by marking the cells with Y or N. Remove rows for Media Types neither supported as user agent nor as origin server.

In the Transformation column specify to which Transfer Syntax UID the origin server transforms the received image. N/A indicates that the media type does not require transformation since there is an existing DICOM Transfer Syntax for it.]

Table A.5-71: Rendered Media Types

Category	Media Type	User Agent	Origin Server	Transformation
Single Frame Image	image/jpeg			
	image/gif			
	image/png			
	image/jp2			
Multi-Frame Image	*image/gif*			
Video	*video/mpeg*			
	video/mp4			
	video/H265			
Text	text/html			
	text/plain			
	text/xml			
	text/rtf			
	application/pdf			

A.5.3.2.2 Retrieve supported transaction (WADO-RS)

The Studies Web Service Retrieve Transaction is also known as WADO-RS.

A.5.3.2.2.1 User Agent

The Retrieve Transaction user agent can request resources listed in Table A.5-72~~Table A.5-72~~:

[List the supported resources for your Retrieve Transaction user agent. Remove the non-supported resources rows. Fill in specific details on your implementation in the in the "Comments" column, when necessary.]

Table A.5-72: Resources Retrieve Transaction - User Agent

Resource	Comments
DICOM Instance Resources – See Resources path in PS3.18 Table 10.4.1-1	
Study Instances	
Series Instances	
Individual Instance	
DICOM Metadata Resources – See Resources path in PS3.18 Table 10.4.1-2	
Study Metadata	
Series Metadata	
Instance Metadata	
DICOM Bulkdata Resources – See Resources path in PS3.18 Table 10.4.1.5-1	
Study Bulkdata	
Series Bulkdata	
Instance Bulkdata	
Bulkdata	
DICOM Pixel Data Resources – See Resources path in PS3.18 Table 10.4.1.6-1	
Study Pixel Data	
Series Pixel Data	
Instance Pixel Data	
Frame Pixel data	
Rendered Resources – See Resources path in PS3.18 Table 10.4.1-3	
rendered study	
rendered series	
rendered instance	
rendered frame	
rendered bulk	
Thumbnail Resources – See Resources path in PS3.18 Table 10.4.1-4	
Study Thumbnail	
Series Thumbnail	
Instance Thumbnail	
Frame Thumbnail	

[If rendering of thumbnails is supported, provide a high-level description of the method used for rendering thumbnails for the study, series, or instance.

For example, the description could indicate whether a representative instance is chosen from a series, and how that instance is selected, or that per-modality fixed content is used.]

The Retrieve Transaction user agent supports the Query Parameters listed in Table A.5-73~~Table A.5-73~~.

[Include a row in the table for each parameter your user agent is able to send, including parameters always sent and parameters optionally sent. Remove the rows for parameters your user agent is not able to send. See PS3.18 Section 8.3.5 for the list of Rendering Query Parameters.

For each row, indicate in the Supported Values column specific Values your user agent may send and/or a description of how the Value is populated. The "Comments" column may be used to explain details of your implementation that may be useful to integrators, such as:

- *Whether and how Values are configurable*
- *Situations when the parameter may or may not be sent, or when specific Values may be used*
- *How the Accept Query Parameter is intended to relate to the Accept Header Field*
- *Other idiosyncrasies of the implementation]*

Table A.5-73: Query Parameters for Retrieve Transaction - User Agent

Query Parameter	Supported Values	Comments

Accept	*[See examples in header parameters.]*	
Rendered Resource		
annotation	<<patient technique>>	
charset	*<<UTF-8 ISO-8859-1 …>>*	
quality		
viewport		
window		
iccprofile	<<no yes srgb adobergb rommrgb>>	
Thumbnail Resource		
charset	<<UTF-8 ISO-8859-1 …>>	
viewport		

The Retrieve Transaction user agent supports Header Fields listed in Table A.5-74~~Table A.5-74~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary. See PS3.18 Section 10.4.4 for the list of resources and their corresponding Media Types.]

Table A.5-74: Header Fields for Retrieve Transaction - User Agent

Header Field	Supported Values	Comments
Instance resource		
Accept	*multipart/related; type="application/dicom"; transfer-syntax={uid}*	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "UA" column
	multipart/related; type="application/octet-stream"	
Metadata resource		
Accept	<<multipart/related; type="application/dicom+xml" multipart/related; type="application/dicom+json">>	
Bulkdata & Pixel Data resource		
Accept	Uncompressed: <<multipart/related; type="application/octet-stream">> Compressed: <<multipart/related; type="{media-type}">> supported {media-type} being <<image/jpeg *image/x-dicom-rle* *image/x-jls* *image/jp2* *image/jpx* *video/mpeg2* *video/mp4>>*	See details in Section A.5.3.2.1.2 DICOM Bulkdata Media Types

Rendered Resource		
Accept	<<image/jpeg image/gif image/png *image/jp2* *image/gif* *video/mpeg* *video/mp4* *video/H265* text/html text/plain *text/xml*>>	See details in section A.5.3.2.1.3 Rendered Media Types
Thumbnail Resource		
Accept	<<image/jpeg image/gif image/png *image/jp2* *image/gif* *video/mpeg* *video/mp4* *video/H265* text/html text/plain *text/xml*>>	See details in section A.5.3.2.1.3 Rendered Media Type
All Resources		
Accept-charset	<<UTF-8 ISO-8859-1 …>>	

A.5.3.2.2.2 Origin Server

The Retrieve Transaction origin server receives GET requests to retrieve specific studies, series or instances.

The user agent specifies the Target Resource as part of the URI and the acceptable response Content-Type in the HTTP Header (i.e., dicom, dicom+xml, dicom+json, octet-stream, compressed pixel data).

The URI is composed by a Base URI: See Section 7.8A.6.3.2.1~~A.6.3.2.1~~ for the Base URI of the origin server

The Retrieve Transaction origin server supports resources listed in Table A.5-75~~Table A.5-75~~.

[List the supported resources for your Retrieve Transaction origin server. Remove the non-supported resources rows. Fill in information on your implementation in the Comments column when necessary.]

Table A.5-75: Resources Retrieve Transaction - Origin Server

Resource	Comments
DICOM Instance Resources – See Resources path in PS3.18 Table 10.4.1-1	
Study Instances	
Series Instances	
Individual Instance	
DICOM Metadata Resources – See Resources path in PS3.18 Table 10.4.1-2	
Study Metadata	
Series Metadata	
Instance Metadata	
DICOM Bulkdata Resources – See Resources path in PS3.18 Table 10.4.1.5-1	
Study Bulkdata	
Series Bulkdata	
Instance Bulkdata	
Bulkdata	

DICOM Pixel Data Resources – See Resources path in PS3.18 table 10.4.1.6-1	
Study Pixel Data	
Series Pixel Data	
Instance Pixel Data	
Frame Pixel data	
Rendered Resources – See Resources path in PS3.18 Table 10.4.1-3	
rendered study	
rendered series	
rendered instance	
rendered frame	
rendered bulk	
Thumbnail Resources – See Resources path in PS3.18 Table 10.4.1-4	
Study Thumbnail	
Series Thumbnail	
Instance Thumbnail	
Frame Thumbnail	

Table A.5-76~~Table A.5-76~~ lists Query parameters supported for the Retrieve Transaction as an origin server.

[List the supported parameters and their supported Values. Fill in information on your implementation in the "Comments" column when necessary. See PS3.18 Section 8.3.5 for the list of Rendering Query Parameters.]

Table A.5-76: Query Parameters for Retrieve Transaction - Origin Server

Query Parameter	Supported Values	Comments
Accept	*[Supported Values are the same as for the Accept Header Field.]*	
Rendered resource		
annotation	<<patient technique>> *[Add additionally supported key word Values here.]*	
charset	<<UTF-8 ISO-8859-1 …>>	
Quality		
Viewport		
Window		
iccprofile	<<no yes srgb adobergb rommrgb>>	
Thumbnail resource		
charset	<<UTF-8 ISO-8859-1 …>>	
Viewport		

The Retrieve Transaction origin server supports Header Fields listed in Table A.5-77~~Table A.5-77~~.

[List the supported Header Field and their supported Values. Fill in information on your implementation in the "Comments" column when necessary. See PS3.18 Section 10.4.4 for the list of resources and their corresponding Media Types.]

Table A.5-77: Header Fields for Retrieve Transaction - Origin Server

Header Field	Supported Values	Comments
Instance resource		

Accept	multipart/related; type="application/dicom"; transfer-syntax={uid}	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "OS" column
	multipart/related; type="application/octet-stream"	
Metadata resource		
Accept	<<multipart/related; type="application/dicom+xml" multipart/related; type="application/dicom+json">>	
Bulkdata & Pixel Data resource		
Accept	Uncompressed: <<multipart/related; type="application/octet-stream">> Compressed: <<multipart/related; type="{media-type}">> supported {media-type} being <<Image/jpeg *image/x-dicom-rle* *image/x-jls* *image/jp2* *image/jpx* *video/mpeg2* *video/mp4*>>	See details in Section A.5.3.2.1.2 DICOM Bulkdata Media Types
Rendered Resource		
Accept	<<image/jpeg image/gif image/png *image/jp2* *image/gif* *video/mpeg* *video/mp4* *video/H265* text/html text/plain *text/xml*>>	See details in Section A.5.3.2.1.3 Rendered Media Type
Thumbnail Resource		
Accept	<<image/jpeg image/gif image/png *image/jp2* *image/gif* *video/mpeg* *video/mp4* *video/H265* text/html text/plain *text/xml*>>	See details in Section A.5.3.2.1.3 Rendered Media Type
All Resources		
Content-Type	Content-Type returned by the origin server in the response. It contains the media type of the Payload. See Accept for supported Values	
Accept-charset	*<<UTF-8* *ISO-8859-1* *…>>*	

A.5.3.2.3 Store Transaction (STOW-RS)

A.5.3.2.3.1 User Agent

For details regarding the IODs created by the system, see Annex 7.8A.9~~A.9~~.

The Store Transaction user agent can request resources listed in Table A.5-78~~Table A.5-78~~.

[List the supported resources for your Store Transaction user agent. Remove the non-supported resources rows. Fill in information on your implementation in the Comments column when necessary.]

Table A.5-78: Resources Store Transaction – User Agent

Resource	Comments
	See resource path in PS3.18 Table: 10.5.1-1
All Studies	
Study	

The Store Transaction user agent supports Header Fields listed in Table A.5-79~~Table A.5-79~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-79: Header Fields for Store Transaction - User Agent

Header Field	Supported Values	Comments
Content-Type	multipart/related; type="application/dicom"; transfer-syntax={uid}	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer syntaxes (look for "Y" in the "UA" column)
	multipart/related; type="application/dicom+xml"; boundary={messageBoundary} multipart/related; type="application/dicom+json"; boundary={messageBoundary}	
	Uncompressed: multipart/related; type="application/octet-stream" *Compressed:* *multipart/related; type="{media-type}"* *supported {media-type} being* <<*Image/jpeg* *image/x-dicom-rle* *image/x-jls* *image/jp2* *image/jpx* *video/mpeg2* *video/mp4*>>	See details in section A.5.3.2.1.2 DICOM Bulkdata Media Types
Content-Length		*[If Content-Encoding is not present]*
Content-Encoding		*[If Content-Length is not present]*

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A.5.3.2.3.2 Origin Server

The Store Transaction origin server receives POST requests to store or append to an existing resource on the server.

The user agent specifies the Target Resource as part of the URI and encapsulates the data in a multipart request body with a proper Content-Type (i.e., BINARY, XML or JSON).

The URI is composed by a Base URI: See Base URI for the origin server in Section 7.8A.6.3.2.2~~A.6.3.2.2~~.

The Store Transaction origin server can request resources listed in Table A.5-80~~Table A.5-80~~.

[Fill in information on your implementation in the Comments column when necessary.]

Table A.5-80: Resources Store Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 Table: 10.5.1-1
All Studies	
Study	

The Store Transaction origin server supports Header Fields listed in Table A.5-81~~Table A.5-81~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-81: Header Fields for Store Transaction - Origin Server

Header Field	Supported Values	Comments
Content-Type	multipart/related; type="application/dicom"; boundary={messageBoundary} multipart/related; type="application/dicom+xml"; boundary={messageBoundary} multipart/related; type="application/dicom+json"; boundary={messageBoundary} multipart/related; type="application/octet-stream"	See in the Overview section Table A.1-1~~Table A.1-1~~ the supported DICOM SOP Classes / Transfer syntaxes (look for "Y" in the "OS" column)
	multipart/related; type="application/dicom+xml"; boundary={messageBoundary} multipart/related; type="application/dicom+json"; boundary={messageBoundary}	
	Uncompressed: multipart/related; type="application/octet-stream" *Compressed:* *multipart/related; type="{media-type}"* *supported {media-type} being <<Image/jpeg* *image/x-dicom-rle*	See details in section A.5.3.2.1.2 DICOM Bulkdata Media Types

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	image/x-jls *image/jp2* *image/jpx* *video/mpeg2* *video/mp4>>*	
Content-Length		*[If Content-Encoding is not present.]*
Content-Encoding		*[If Content-Length is not present.]*

A.5.3.2.4 Search Transaction (QIDO-RS)

A.5.3.2.4.1 User Agent

The Search Transaction user agent can request resources listed in Table A.5-82~~Table A.5-82~~.

[List the supported resources for your Search Transaction user agent. Remove the non-supported resources rows. Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-82: Resources Search Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 Table: 10.6.1-1
All studies	
All series	
All instances	
Study's Series	
Study's instances	
Study Series's Instances	

The Search Transaction user agent supports query parameters listed in Table A.5-83~~Table A.5-83~~.

[Indicate the supported parameters and their supported Values. For detail on the implementation possibilities see DICOM PS3.18 Table 8.3.4-1. *Fill in specific details of your implementation if available in the "Comments" column.]*

Table A.5-83: Query Parameters for Search Transaction - User Agent

Query Parameter	Supported Values	Comments
match	Attribute Values to address the search (matching key). See the supported DICOM Attribute in the Table A.5-84~~Table A.5-84~~	
includefield	Attributes to be included in the response (return key). See the supported DICOM Attributes in the Table A.5-84~~Table A.5-84~~	
fuzzymatching	<<true false>>	
Limit		*[Maximum number of results the server returns.]*
Offset		*[Number of results the server skips before the first returned result.]*

[Indicate which DICOM query Attributes are supported and if they are supported as Matching and/or Return (include) key. Add or remove Attributes according to your implementation. If the tables are the same as used in DIMSE Services, you can enter a reference to Table A.5-17~~Table A.5-17~~ and remove the text and table below. Otherwise provide the following text and Table A.5-84~~Table A.5-84~~.]

Table A.5-84~~Table A.5-84~~ lists the DICOM query Attributes supported by the Search Transaction user agent.

Table A.5-84: Supported Query Attributes User Agent

Attribute Name	Tag	Matching Key	Return Key	Comments
Study Level (May be used for All studies, All series, All instance resource query)				
SpecificCharacterSet	(0008,0005)			
StudyDate	(0008,0020)			
StudyTime	(0008,0030)			
AccessionNumber	(0008,0050)			
ModalitiesInStudy	(0008,0061)			
ReferringPhysicianName	(0008,0090)			
TimezoneOffsetFromUTC	(0008,0201)			
PatientName	(0010,0010)			
PatientID	(0010,0020)			
PatientBirthDate	(0010,0030)			
PatientSex	(0010,0040)			
StudyInstanceUID	(0020,000D)			
StudyID	(0020,0010)			
NumberOfStudyRelatedSeries	(0020,1206)			
NumberOfStudyRelatedInstances	(0020,1208)			
…				
Series Level (May be used for All Series, Study's Series, Study's Instances, All Instances resource query)				
SpecificCharacterSet	(0008,0005)			
Modality	(0008,0060)			
TimezoneOffsetFromUTC	(0008,0201)			
SeriesDescription	(0008,103E)			
SeriesInstanceUID	(0020,000E)			
SeriesNumber	(0020,0011)			
NumberOfSeriesRelatedInstances	(0020,1209)			
PerformedProcedureStepStartDate	(0040,0244)			
PerformedProcedureStepStartTime	(0040,0245)			
RequestAttributeSequence	(0040,0275)			
> RequestedProcedureID	(0040,1001)			
> ScheduledProcedureStepID	(0040,0009)			
…				
Instance Level (May be used for All instances, Study's instance, Study Series's instance resource query)				
SpecificCharacterSet	(0008,0005)			
SOPClassUID	(0008,0016)			
SOPInstanceUID	(0008,0018)			
InstanceAvailability	(0008,0056)			
TimezoneOffsetFromUTC	(0008,0201)			
RetrieveURL	(0008,1190)			
InstanceNumber	(0020,0013)			
Rows	(0028,0010)			
Columns	(0028,0011)			
BitsAllocated	(0028,0100)			
NumberOfFrames	(0028,0008)			
…				

The Search Transaction user agent supports Header Fields listed in Table A.5-85~~Table A.5-85~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-85: Header Fields for Search Transaction - User Agent

Header Field	Supported Values	Comments
Accept	<<multipart/related; type="application/dicom+xml" application/dicom+json>>	
Accept-charset	See Section A.5.7 for supported Values	

A.5.3.2.4.2 Origin Server

The Search Transaction origin server receives GET requests to search for studies, series or instances.

[Specify here if this is a native or a DIMSE proxy implementation.]

The user agent specifies the Target Resource as part of the URI and the acceptable response Content-Type in the HTTP Header (i.e., dicom+xml or dicom+json).

The URI is composed by a Base URI: See Base URI for the origin server in Section A.6.3.2.3.

The Search Transaction origin server supports resources listed in Table A.5-86~~Table A.5-86~~.

[Fill in information on your implementation in the Comments column when necessary.]

Table A.5-86: Resources Search Transaction - Origin Server

Transaction	Resource	Comments
		See resource path in PS3.18 Table: 10.6.1-1
Search	All studies	
	All series	
	All instances	
	Study's Series	
	Study's instances	
	Study Series's Instances	

The Search Transaction origin server supports query parameters listed in Table A.5-87~~Table A.5-87~~.

[List the supported parameters and their supported Values. For detail on the implementation possibilities see the DICOM PS3.18 Table 8.3.4-1. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-87: Query Parameters for Search Transaction - Origin Server

Query Parameter	Supported Values	Comments
match	Attribute Values to address the search (matching key). See the supported DICOM Attributes provided in the response in the Table A.5-89~~Table A.5-89~~	
includefield	Attributes to be included in the response (return key). See the supported DICOM Attributes provided in the response in the Table A.5-89~~Table A.5-89~~	
fuzzymatching	<<true false>>	

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limit		
offset	Number of results the server skips before the first returned result	

The Search Transaction origin server supports Header Fields listed in Table A.5-88~~Table A.5-88~~.

[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-88: Header Fields for Search Transaction - Origin Server

Header Field	Supported Values	Comments
Accept	Received in the user agent request: multipart/related; type="application/dicom+xml" application/dicom+json	
Content-Type	Application/dicom+json (Default) Multipart/related; type="application/dicom+xml"	
Content-Length		*[If Content-Encoding is not present.]*
Content-Encoding		*[If Content-Length is not present.]*

[Indicate which DICOM query Attributes are supported / returned in the response and if they are supported as Matching and/or Return (include) key. If the tables are the same as used in DIMSE Services, you can enter a reference to Table A.5-18~~Table A.5-18~~ and remove the text and table below. Otherwise provide the following text and Table A.5-89~~Table A.5-89~~, and add or remove Attributes according to your implementation. In the table below, Attributes / matching /return keys in regular font style are mandatory to be supported.]

Table A.5-89~~Table A.5-89~~ lists the DICOM query / returned Attributes supported by the Search Transaction origin server.

Table A.5-89: Query / Return Key Search Transaction - Origin Server

Attribute Name	Tag	Matching Key	Return Key	Comments on the Response
Study Level (May be used for All studies, All series, All instance resource query)				
StudyDate	(0008,0020)			
StudyTime	(0008,0030)			
AccessionNumber	(0008,0050)			
ModalitiesInStudy	(0008,0061)			
ReferringPhysicianName	(0008,0090)			
TimezoneOffsetFromUTC	(0008,0201)			*Will be returned if known*
Retrieve URL	(0008,1190)			*Will be present if the Instance is retrievable by the Retrieve Transaction*
PatientName	(0010,0010)			
PatientID	(0010,0020)			
PatientBirthDate	(0010,0030)			
PatientSex	(0010,0040)			
StudyInstanceUID	(0020,000D)			
StudyID	(0020,0010)			
NumberOfStudyRelatedSeries	(0020,1206)			
NumberOfStudyRelatedInstances	(0020,1208)			

Attribute Name	Tag	Matching Key	Return Key	Comments on the Response
…				
Series Level (May be used for All Series, Study's Series, Study's Instances, All Instances resource query)				
Modality	(0008,0060)			
TimezoneOffsetFromUTC	(0008,0201)			*Will be present if known*
SeriesDescription	(0008,103E)			*Will be present if known*
Retrieve URL	(0008,1190)			*Will be present if the Instance is retrievable by the Retrieve Transaction*
SeriesInstanceUID	(0020,000E)			
SeriesNumber	(0020,0011)			
NumberOfSeriesRelatedInstances	(0020,1209)			
PerformedProcedureStepStartDate	(0040,0244)			*Will be present if known*
PerformedProcedureStepStartTime	(0040,0245)			*Will be present if known*
RequestAttributeSequence	(0040,0275)			*Will be present if known*
> RequestedProcedureID	(0040,1001)			
> ScheduledProcedureStepID	(0040,0009)			
…				
Instance Level (May be used for All instances, Study's instance, Study Series's instance resource query)				
SOPClassUID	(0008,0016)			
SOPInstanceUID	(0008,0018)			
InstanceAvailability	*(0008,0056)*			*Will be present if known*
TimezoneOffsetFromUTC	(0008,0201)			*Will be present if known*
RetrieveURL	(0008,1190)			*Will be present if the Instance is retrievable by the Retrieve Transaction*
InstanceNumber	(0020,0013)			
Rows	(0028,0010)			*Will be present if known*
Columns	(0028,0011)			*Will be present if known*
BitsAllocated	(0028,0100)			*Will be present if known*
NumberOfFrames	(0028,0008)			*Will be present if known*
…				

A.5.3.3 Worklist Web Service

This section provides details regarding the Worklist Web Service. For an overview of supported transactions and resources see Table A.1-10 Worklist Service~~Table A.1-10 Worklist Service~~.

A.5.3.3.1 Create Transaction Worklist Web Service

A.5.3.3.1.1 User Agent

The Worklist Web Service user agent can request resources listed in Table A.5-90~~Table A.5-90~~ for the Create Workitem Transaction.

[Indicate the supported resources. Remove the non-supported resources rows. Fill in information on your implementation in the Comments column when necessary.]

Table A.5-90: Resources for the Worklist Web Service Create Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 section: 11.4.1.1
worklist	
workitems	

Table A.5-91~~Table A.5-91~~ lists the Query parameters supported by Worklist Web Service user agent for the Create Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-91: Query Parameters for Worklist Web Service Create Workitem– User Agent

Query Parameter	Supported Values	Comments

Table A.5-92~~Table A.5-92~~ lists the Header fields supported by the Worklist Web Service user agent for the Create Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.4.1-3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-92: Header Fields for Worklist Web Service Create Workitem Worklist Web Service – User Agent

Header Field	Supported Values	Comments

A.5.3.3.1.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-93~~Table A.5-93~~ for the Create Transaction:

[Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-93: Resources for the Worklist Web Service Create Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 section: 11.4.1.1
worklist	
workitems	

Table A.5-94~~Table A.5-94~~ lists the Query parameters supported by Worklist Web Service origin server for the Create Transaction.

[Indicate the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.4.1-3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-94: Query Parameters for Worklist Web Service Create Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-95~~Table A.5-95~~ lists the Header fields supported by the Worklist Web Service origin server for the Create Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.4.1-3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-95: Header Fields for Worklist Web Service Create Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.2 Retrieve Transaction Worklist Web Service

A.5.3.3.2.1User Agent

The Retrieve Workitem Transaction user agent can request resources listed in Table A.5-96~~Table A.5-96~~.

[Fill in information on your implementation in the Comments column when necessary.]

Table A.5-96: Resources for Worklist Web Service Retrieve Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 section 11.5.1
workitem	*/workitems/{workitem}*

Table A.5-97~~Table A.5-97~~ lists the Query parameters supported by Worklist Web Service user agent for the Retrieve Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in the DICOM PS3.18 Table: 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-97: Query Parameters for Worklist Web Service Retrieve Workitem Transaction – User Agent

Query Parameter	Supported Values	Comments

Table A.5-98~~Table A.5-98~~ lists the Header fields supported by the Worklist Web Service user agent for the Retrieve Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.5.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-98: Header Fields for Worklist Web Service Retrieve Workitem– User Agent

Header Field	Supported Values	

A.5.3.3.2.2 Origin Server

The Retrieve Workitem Transaction origin server can request Resources listed in Table A.5-99~~Table A.5-99~~.

[Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-99: Resources for Worklist Web Service Retrieve Transaction- Origin Server

Resource	Comments
	See resource path in PS3.18 section 11.5.1

workitem	

Table A.5-100~~Table A.5-100~~ lists the Query parameters supported by Worklist Web Service origin server for the Retrieve Transaction.

[Indicate the supported parameters and their supported Values. See possible parameters / Values in PS 3.18 Table: 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-100: Query Parameters for Worklist Web Service Retrieve Workitem – Origin Server

Query Parameter	Supported Values	Comments

Table A.5-101~~Table A.5-101~~ lists the Header fields supported by the Worklist Web Service origin server for the Retrieve Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.5.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-101: Header Fields for Worklist Web Service Retrieve Workitem – Origin Server

Header Field	Supported Values	Comments

A.5.3.3.3 Update Transaction Worklist Web Service

A.5.3.3.3.1 User Agent

The Update Workitem Transaction user agent can request resources listed in Table A.5-102~~Table A.5-102~~.

[Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-102: Resources for Worklist Web Service Update Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 *section 11.6.1*
workitem	

Table A.5-103~~Table A.5-103~~ lists the Query parameters supported by Worklist Web Service user agent for the Update Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 section: 11.6.1.2. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-103: Query Parameters for Worklist Web Service Update Transaction – User Agent

Query Parameter	Supported Values	Comments

Table A.5-104~~Table A.5-104~~ lists the Header fields supported by the Worklist Web Service user agent for the Update Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section: 11.6.1.3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-104: Header Fields for Worklist Web Service Update Transaction – User Agent

Header Field	Supported Values	Comments

A.5.3.3.3.2 Origin Server

The Update Workitem Transaction origin server can request resources listed in Table A.5-105~~Table A.5-105~~.

[Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-105: Resources for t Worklist Web Service Update Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 *section_11.6.1*
workitem	

Table A.5-106~~Table A.5-106~~ lists the Query parameters supported by Worklist Web Service origin server for the Update Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 section: 11.6.1.2. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-106: Query Parameters for Worklist Web Service Update Transaction – Origin Server

Query Parameter	Supported Values	Comments

Table A.5-107~~Table A.5-107~~ lists the Header fields supported by the Worklist Web Service user agent for the Update Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section: 11.6.1.3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-107: Header Fields for Worklist Web Service Update Transaction – Origin Server

Header Field	Supported Values	Comments

A.5.3.3.4 Change State Transaction Worklist Web Service

A.5.3.3.4.1 User Agent

The Change State Transaction user agent can request resources listed in Table A.5-108~~Table A.5-108~~.

Table A.5-108: Resources for Worklist Web Service Change State - User Agent

Resource	Comments
	See resource path in PS3.18 Table 11.1.1-1
Workitem state	/workitems/{workitem}/state

Table A.5-109~~Table A.5-109~~ lists the Query parameters supported by Worklist Web Service user agent for the Change State Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-109: Query Parameters for Worklist Web Service Change State– User Agent

Query Parameter	Supported Values	Comments

Table A.5-110~~Table A.5-110~~ lists the Header fields supported by the Worklist Web Service user agent for the Change State Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.7.1-1. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-110: Header Fields for Worklist Web Service Change State – User Agent

Header Field	Supported Values	Comments

A.5.3.3.4.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-111~~Table A.5-111~~ for the Change State Transaction

Table A.5-111: Resources for Worklist Web Service Change State - Origin Server

Resource	Comments
	See resource path in PS3.18 Table 11.1.1-1
Workitem state	/workitems/{workitem}/state

Table A.5-112~~Table A.5-112~~ lists the Query parameters supported by Worklist Web Service origin server for the Change State Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.1.2-1. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-112: Query Parameters for Worklist Web Service Change State Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-113~~Table A.5-113~~ lists the Header fields supported by the Worklist Web Service origin server for the Change State Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table: 11.7.1-1. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-113: Header Fields for Worklist Web Service Change State Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.5 Request Cancellation Transaction Worklist Web Service

A.5.3.3.5.1 User Agent

[If your system does not support the Worklist Web Service Request Cancellation Transaction as user agent, you can indicate that this section is not applicable and remove the Table and subsections below.]

The Request Cancellation Transaction user agent can request resources listed in Table A.5-114~~Table A.5-114~~.

Table A.5-114: Resources for the Worklist Web Service Request Cancellation Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 section 11.8.1
Workitem Request Cancellation	/workitems/{workitem}/cancelrequest

Table A.5-115~~Table A.5-115~~ lists the Query parameters supported by Worklist Web Service user agent for the Request Cancellation Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-115: Query Parameters for Worklist Web Service Request Cancellation – User Agent

Query Parameter	Supported Values	Comments

Table A.5-116~~Table A.5-116~~ lists the Header fields supported by the Worklist Web Service user agent for the Request Cancellation Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 11.8.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-116: Header Fields for Worklist Web Service Request Cancellation – User Agent

Header Field	Supported Values	Comments

A.5.3.3.5.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-117~~Table A.5-117~~ for the Request Cancellation Transaction.

Table A.5-117: Resources for the Worklist Web Service Request Cancellation - Origin Server

Resource	Comments
	See resource path in PS3.18 section 11.8.1
Workitem Request Cancellation	/workitems/{workitem}/cancelrequest

Table A.5-118

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~~Table A.5-118~~ lists the Query parameters supported by Worklist Web Service origin server for the Request Cancellation Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-118: Query Parameters for Worklist Web Service Request Cancellation Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-119~~Table A.5-119~~ lists the Header fields supported by the Worklist Web Service origin server for the Request Cancellation Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 11.8.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-119: Header Fields for Worklist Web Service Request Cancellation Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.6 SearchTransaction Worklist Web Service

A.5.3.3.6.1 User Agent

The Search Transaction user agent can request resources listed in Table A.5-120~~Table A.5-120~~.

Table A.5-120: Resources for Worklist Web Service Search Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 section 11.9.1
Workitem	/workitems

Table A.5-121~~Table A.5-121~~ lists the Query parameters supported by Worklist Web Service user agent for the Search Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 8.3.4-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-121: Query Parameters for Worklist Web Service Search Transaction – User Agent

Query Parameter	Supported Values	Comments

Table A.5-122~~Table A.5-122~~ lists the Header fields supported by the Worklist Web Service user agent for the Search Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 11.9.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-122: Header Fields for Worklist Web Service Search Transaction – User Agent

Header Field	Supported Values	Comments

A.5.3.3.6.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-123~~Table A.5-123~~ for the Search Transaction.

Table A.5-123: Resources for Worklist Web Service Search Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 section 11.9.1
workitem	/workitems?{&match*}{&includefield}{&fuzzymatching}{&offset}{&limit}

Table A.5-124~~Table A.5-124~~ lists the Query parameters supported by Worklist Web Service origin server for the Search Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 8.3.4-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-124: Query Parameters for Worklist Web Service Search Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-125~~Table A.5-125~~ lists the Header fields supported by the Worklist Web Service origin server for the Search Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 11.9.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-125: Header Fields for Worklist Web Service Search Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.7 Subscribe Transaction Worklist Web Service

[If your system does not support the Worklist Web Service Subscribe Transaction, you can indicate that this section is not applicable and remove the subsections below.]

A.5.3.3.7.1 User Agent

The Subscribe Transaction user agent can request resources listed in Table A.5-126~~Table A.5-126~~.

[List the supported resources. Remove the non-supported resources rows. Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-126: Resources for Worklist Web Service Subscribe Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 Table 11.10.1-1
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}
workitem	/workitems/{workitem}/subscribers/{aetitle}

Table A.5-127~~Table A.5-127~~ lists the Query parameters supported by Worklist Web Service user agent for the Subscribe Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.10.1-2. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-127: Query Parameters for Worklist Web Service Subscribe Transaction – User Agent

Query Parameter	Supported Values	Comments

Table A.5-128~~Table A.5-128~~ lists the Header fields supported by the Worklist Web Service user agent for the Subscribe Transaction:

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-128: Header Fields for Worklist Web Service Subscribe Transaction – User Agent

Header Field	Supported Values	Comments

A.5.3.3.7.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-129~~Table A.5-129~~ for the Subscribe Transaction.

[List the supported resources. Remove the non-supported resources rows. Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-129: Resources for Worklist Web Service Subscribe Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 Table 11.10.1-1
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}
workitem	/workitems/{workitem}/subscribers/{aetitle}

Table A.5-130~~Table A.5-130~~ lists the Query parameters supported by Worklist Web Service origin server for the Subscribe Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table: 11.10.1-2. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-130: Query Parameters for Worklist Web Service Subscribe Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-131~~Table A.5-131~~ lists the Header fields supported by the Worklist Web Service origin server for the Subscribe Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in the DICOM PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-131: Header Fields for Worklist Web Service Subscribe Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.8 Unsubscribe Transaction Worklist Web Service

A.5.3.3.8.1 User Agent

The Unsubscribe Transaction user agent can request resources listed in Table A.5-132~~Table A.5-132~~.

[List the supported resources. Remove the non-supported resources rows. Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-132: Resources for Worklist Web Service Unsubscribe Transaction - User Agent

Resource	Comments

	See resource path in PS3.18 Table 11.11.1-1
Workitem	workitems/{workitem}/subscribers/{aetitle}
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}

Table A.5-133~~Table A.5-133~~ lists the Header fields supported by the Worklist Web Service user agent for the Unsubscribe Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-~~133~~133: Header Fields for Worklist Web Service Unsubscribe Transaction– User Agent

Header Field	Supported Values	Comments

A.5.3.3.8.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-134~~Table A.5-134~~ for the Unsubscribe Transaction.

Table A.5-134: Resources for Worklist Web Service Unsubscribe Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 Table 11.11.1-1
workitem	workitems/{workitem}/subscribers/{aetitle}
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}{/suspend}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}{/suspend}

Table A.5-135~~Table A.5-135~~ lists the Header fields supported by the Worklist Web Service origin server for the Unsubscribe Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-135: Header Fields for Worklist Web Service Unsubscribe Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.3.9 Suspend Global Subscription Transaction Worklist Web Service

A.5.3.3.9.1 User Agent

The Suspend Global Subscription Transaction user agent can request resources listed in Table A.5-136~~Table A.5-136~~.

[List the supported resources. Remove the non-supported resources rows. Fill in specific details of your implementation if available in the "Comments" column.]

Table A.5-136: Resources for Worklist Web Service Suspend Global Subscription Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 Table 11.12.1-1
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}{/suspend}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}{/suspend}

Table A.5-137~~Table A.5-137~~ lists the Header fields supported by the Worklist Web Service user agent for the Suspend Global Subscription Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-137: Header Fields for Worklist Web Service Suspend Global Subscription Transaction – User Agent

Header Field	Supported Values	Comments

A.5.3.3.9.2 Origin Server

The Worklist Web Service origin server supports resources listed in Table A.5-138~~Table A.5-138~~ for the Suspend Global Subscription Transaction.

Table A.5-138: Resources for Worklist Web Service Suspend Global Subscription Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 Table 11.12.1-1
worklist	/workitems/1.2.840.10008.5.1.4.34.5/subscribers/{aetitle}{/suspend}
Filtered worklist	/workitems/1.2.840.10008.5.1.4.34.5.1/subscribers/{aetitle}{/suspend}

Table A.5-139~~Table A.5-139~~ lists the Header fields supported by the Worklist Web Service origin server for the Suspend Global Subscription Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Table 8.4.1-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-139: Header Fields for Worklist Web Service Suspend Global Subscription Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.4 Non-Patient Instance Web Service

This section provides details regarding the Non-Patient Instance Web Service. For an overview of supported Transactions and resources see Table A.1-11 Non-Patient Instance Service~~Table A.1-11 Non-Patient Instance Service~~.

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A.5.3.4.1 Supported Web Media Types

The supported Non-Patient Instance Storage SOP Classes are listed in the Table A.5-140~~Table A.5-140~~ below. The supported Transfer Syntaxes are listed in Section A.1.1 of this document.

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[Indicate which SOP Classes are supported by your system. Remove the unsupported ones. See possible NPI SOP Classes in PS 3.4 Table GG.3-1

- *In the URI user agent / origin server columns use Y or N to indicate Support for the listed SOP Class.If SOP Class is neither supported as user agent nor origin server, remove row.]*

Table A.5-140: Non-Patient Instance Web Service Storage SOP Classes

SOP Class name	SOP Class UID	User Agent	Origin Server	Comments
Hanging Protocol Storage	*1.2.840.10008.5.1.4.38.1*			

Color Palette Storage	*1.2.840.10008.5.1.4.39.1*			
Generic Implant Template Storage	*1.2.840.10008.5.1.4.43.1*			
Implant Assembly Template Storage	*1.2.840.10008.5.1.4.44.1*			
Implant Template Group Storage	*1.2.840.10008.5.1.4.45.1*			
CT Defined Procedure Protocol Storage	*1.2.840.10008.5.1.4.1.1.200.1*			
Protocol Approval Storage	*1.2.840.10008.5.1.4.1.1.200.3*			

[Provide requirements for display and processing of instances received via Web Services. This could either be done by referencing section A.5.2.5.2 if the same requirements apply, or by copying the tables from Section A.5.2.5.2 and filling them appropriately, if requirements for Web Services differ.]

A.5.3.4.2 Retrieve Transaction

A.5.3.4.2.1 User Agent

The Non-Patient Instance (NPI) Retrieve transaction as user agent can request resources listed in Table A.5-141~~Table A.5-141.~~

[Provide implementation specific details in the "Comments" column and indicate the supported {npi-name}. They can be:

- *color-palettes*
- *defined-procedure-protocols*
- *hanging-protocols*
- *implant-templates]*

Table A.5-141: Resources for NPI Web Services Retrieve Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 Table 12.4.1-1
Instance	/{npi-name}/{uid}

Table A.5-142~~Table A.5-142~~ lists the Query parameters supported by the NPI Web Service user agent for the Retrieve Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table 12.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-142: Query Parameters for NPI Web Services Retrieve Transaction - User Agent

Query Parameter	Supported Values	Comments

Table A.5-143~~Table A.5-143~~ lists the Header Fields supported by the NPI Web Service user agent for the Retrieve Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values PS3.18 section 12.4.1.3. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-143: Header Fields for NPI Web Services Retrieve Transaction - User Agent

Header Field	Supported Values	Comments

A.5.3.4.2.2 Origin Server

The NPI Web Service origin server supports resources listed in Table A.5-144~~Table A.5-144~~ for the Retrieve Transaction:

[Provide implementation specific details in the "Comments" column and indicate the supported {npi-name}. They can be:

- *color-palettes*
- *defined-procedure-protocols*
- *hanging-protocols*
- *implant-templates]*

Table A.5-144: Resources for NPI Web Services Retrieve Transaction – Origin Server

Resource	Comments
	See resource path in PS3.18 Table 12.4.1-1
Instance	/{npi-name}/{uid}

Table A.5-145~~Table A.5-145~~ lists the Query parameters supported by the NPI Web Service origin server for the Retrieve Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table 12.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-145: Query Parameters for NPI Web Services Retrieve Transaction – Origin Server

Query Parameter	Supported Values	Comments

Table A.5-146~~Table A.5-146~~ lists the Header Fields supported by the NPI Web Service origin server for the Retrieve Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section 12.4.1.3 *and 12.4.3.2. Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-146: Header Fields for NPI Web Services Retrieve Transaction – Origin Server

Header Field	Supported Values	Comments

A.5.3.4.3 Store Transaction

A.5.3.4.3.1 User Agent

For details regarding the IODs created by the system, see Annex 7.8A.9~~A.9~~.

The NPI Store Transaction user agent can request resources listed in Table A.5-147~~Table A.5-147~~.

[List the supported resources. Remove the non-supported resources rows.

Provide implementation specific details in the "Comments" column and indicate what the supported {npi-name} are. They can be:

- *color-palettes*
- *defined-procedure-protocols*

- *hanging-protocols*
- *implant-templates]*

Table A.5-147: Resources for NPI Web Services Store Transaction – User Agent

Resource	Comments
	See resource path in PS3. 18 Table: 12.5.1-1
All Instances	*/{npi-name}*
instance	*/{npi-name} {/uid}*

Table A.5-148~~Table A.5-148~~ lists the Query parameters supported by the NPI Web Service user agent for the Store Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table 12.1.2-1. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-148: Query Parameters for NPI Web Services Store Transaction - User Agent

Query Parameter	Supported Values	Comments

Table A.5-149~~Table A.5-149~~ lists the Header fields supported by the NPI Web Service user agent for the Store Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section 12.5.1.3*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-149: Header Fields for NPI Web Services Store Transaction - User Agent

Header Field	Supported Values	Comments

A.5.3.4.3.2 Origin Server

The NPI Store Transaction origin server receives POST requests to store or append to an existing resource on the server.

The user agent specifies the Target Resource as part of the URI and encapsulates the data in a multipart request body with a proper Content-Type (i.e., BINARY, XML or JSON).

The URI is composed by a Base URI: See Base URI for the origin server in section A.6.3.4.

The NPI Store Transaction origin server supports resources listed in Table A.5-150~~Table A.5-150~~.

[List the supported resources. Remove the non-supported resources rows.

Provide implementation specific details in the "Comments" column and indicate what are the supported {npi-name}. They can be:

- *color-palettes*
- *defined-procedure-protocols*
- *hanging-protocols*
- *implant-templates]*

Table A.5-150: Resources for NPI Web Services Store Transaction - Origin Server

Transaction	Resource	Comments
		See resource path in PS3.18 Table: 12.5.1-1
Store (a set of instances)	*All Instances*	
Store (a single instance)	*Instance*	

Table A.5-151~~Table A.5-151~~ lists the Query parameters supported by the NPI Web Service origin server for the Store Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Table 12.1.2-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-151: Query Parameters for NPI Web Services Store Transaction – Origin Server

Query Parameter	Supported Values	Comments

Table A.5-152~~Table A.5-152~~ lists the Header fields supported by the NPI Web Service origin server for the Store Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section 12.5.1.3*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-152: Header Fields for NPI Web Services Store Transaction - Origin Server

Header Field	Supported Values	Comments

A.5.3.4.4 Search Transaction

A.5.3.4.4.1 User Agent

The NPI Search Transaction user agent can request resources listed in Table A.5-153~~Table A.5-153~~.

[Provide implementation specific details in the "Comments" column and indicate what are the supported {npi-name}. They can be:

- *color-palettes*
- *defined-procedure-protocols*
- *hanging-protocols*
- *implant-templates]*

Table A.5-153: Resources for NPI Web Services Search Transaction - User Agent

Resource	Comments
	See resource path in PS3.18 Table: 12.6.1-1
All Instances	/{npi-name}

Table A.5-154~~Table A.5-154~~ lists the Query parameters supported by the NPI Web Service user agent for the Search Transaction.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Section 12.1.2 *and* Table 8.3.4-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-154: Query Parameters for NPI Web Services Search Transaction - User Agent

Query Parameter	Supported Values	Comments

Table A.5-155~~Table A.5-155~~ lists the DICOM query Attributes supported by the NPI Web Service user agent for the Search Transaction.

[Indicate which DICOM query Attributes are supported and if they are supported as Matching and/or Return (include) key. See PS 3.18 Table 12.6.1-2 *]*

Table A.5-155: Supported Query Attributes for NPI Web Services Search Transaction - User Agent

Attribute Name	Tag	Matching Key	Return Key	Comments

Table A.5-156~~Table A.5-156~~ lists the Header fields supported by the NPI Web Service user agent for the Search Transaction.

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 section 12.6.1.3. Fill in information on your implementation in the "Comments" column when necessary.]

Table A.5-156: Header Fields for NPI Web Services Search Transaction - User Agent

Header Field	Supported Values	Comments

A.5.3.4.4.2 Origin Server

The NPI Search Transaction origin server receives GET requests to search for studies, series or instances.

[Specify here if this is a native or a DIMSE proxy implementation.]

The user agent specifies the Target Resource as part of the URI and the acceptable response Content-Type in the HTTP Header (i.e., dicom+xml or dicom+json).

The URI is composed by a Base URI: See Base URI for the origin server in Section A.6.3.4.

The Search Transaction origin server supports resources listed in Table A.5-157~~Table A.5-157~~.

[Provide implementation specific details in the "Comments" column and indicate the supported {npi-name}. They can be:

- *color-palettes*
- *defined-procedure-protocols*
- *hanging-protocols*
- *implant-templates]*

Table A.5-157: Resources for NPI Web Services Search Transaction - Origin Server

Resource	Comments
	See resource path in PS3.18 Table: 12.6.1-1
All Instances	/{npi-name}

Table A.5-158~~Table A.5-158 lists the Query parameters supported by the NPI Web Service origin server for the search Transaction~~.

[List the supported parameters and their supported Values. See possible parameters / Values in PS3.18 Section 12.1.2 *and* Table 8.3.4-1. *Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-~~158~~158: Query Parameters for NPI Web Services Search Transaction - Origin Server

Query Parameter	Supported Values	Comments

Table A.5-159~~Table A.5-159 lists the Header fields supported by the NPI Web Service origin server for the Search Transaction.~~

[List the supported Header fields and their supported Values. See possible Header fields / Values in PS3.18 Section 12.6.1.3 *and 12.6.3.2. Fill in information on your implementation in the "Comments" column when necessary.]*

Table A.5-159: Header Fields for NPI Web Services Search Transaction - Origin Server

Header Field	Supported Values	Comments

Table A.5-160~~Table A.5-160~~ lists the DICOM query / returned Attributes supported by the NPI Web Service origin server for the Search Transaction.

[Indicate which DICOM query Attributes are supported / returned in the response and if they are supported as Matching and/or Return (include) key. See PS3.18 Table 12.6.1-2]

Table A.5-160: Query / Return Key for NPI Web Services Search Transaction - Origin Server

Attribute Name	Tag	Matching Key	Return Key	Comments on the response

A.5.3.5 Notification Web Service

[If your Web Service supports notification, describe how WebSocket connections are opened. See details in PS3.18 section 8.10]

A.5.4 Media Service

A.5.4.1 File Set Creator (FSC)

<Product> supports creating the Basic Directory IOD as a File Set Creator as defined in Annex A.9.5.

For a list of supported Media Application Profiles, see Section A.1.4 in the Overview.

For a list of supported SOP Classes, see Section A.1.1 in the Overview.

[Describe, how the File Set Creator is selecting the Media Application Profiles used for creating the Media.]

A.5.4.2 File Set Reader (FSR)

<Product> supports the Media Application Profiles listed in Section A.1.4 in the Overview.

For a list of supported SOP Classes, see Section A.1.1 in the Overview.

[Provide requirements for display and processing of instances contained on the medium. This could either be done by referencing Section A.5.2.5.2 (as indicated below), if the same requirements apply, or by copying the tables from Section A.5.2.5.2 and filling them appropriately, if requirements for external media differ.]

To display or process DICOM Instances contained on the Media, see Section A.5.2.5.2.

A.5.4.3 File Set Updater (FSU)

<Product> supports creating the Basic Directory IOD as defined in Annex A.9.5.

For a list of supported Media Application Profiles, see Section A.1.4 in the Overview.

For a list of supported SOP Classes, see Section A.1.1 in the Overview.

A.5.5 Real Time Video Service

A.5.5.1 Service Consumer

For a list of supported SOP Classes, see Section A.1.5 in the Overview.

Table A.5-161~~Table A.5-161~~ lists restrictions that apply to the RTV instances supported by the Service Consumer.

[List the restrictions for the RTV Service Consumer in Table A.5-161~~Table A.5-161~~ below.]

Table A.5-161: DICOM-RTV Instances Specification Service Consumer

Category	Restrictions
Photometric Interpretation	*RGB*
Bit depth (video)	*10*
Number of Waveform Channels	*2*
Bit depth (audio)	*16 (signed 16-bits linear)*
Sampling Frequency	*48 kHz*

Table A.5-162~~Table A.5-162~~ lists the screen resolutions that are supported by the Service Consumer.

[List all supported screen resolutions in Table A.5-162~~Table A.5-162~~ below.]

Table A.5-162: DICOM-RTV Screen Resolutions Service Consumer

Rows	Columns	Frame rate	Video Type	Progressive or Interlaced
1080	*1920*	*25*	*25 Hz HD*	*P*
1080	*1920*	*29.97, 30*	*30 Hz HD*	*P*
1080	*1920*	*25*	*25 Hz HD*	*I*
1080	*1920*	*29.97, 30*	*30 Hz HD*	*I*
720	*1280*	*25*	*25 Hz HD*	*P*
720	*1280*	*29.97, 30*	*30 Hz HD*	*P*
720	*1280*	*50*	*50 Hz HD*	*P*
720	*1280*	*59.94, 60*	*60 Hz HD*	*P*

[Provide the connection policies including access to the URL to retrieve the SDP object and the number of simultaneous connections.]

A.5.5.2 Service Provider

For a list of supported SOP Classes, see Section A.1.5 in the Overview.

Table A.5-163~~Table A.5-163~~ list restrictions that apply to the RTV instances supported by the Service Provider.

[List the restrictions for the RTV Service Consumer in Table A.5-163~~Table A.5-163~~ below.]

Table A.5-163: DICOM-RTV Instances Specification Service Provider

Category	Restrictions
Photometric interpretation	*RGB*
Bit depth (video)	*10*
Number of Waveform Channels	*2*
Bit depth (audio)	*16 (signed 16-bits linear)*
Sampling Frequency	*48 kHz*

Table A.5-164~~Table A.5-164~~ list the screen resolutions that are supported by the Service Provider.

[List all supported screen resolutions in Table A.5-164~~Table A.5-164~~ below.]

Table A.5-164: DICOM RTV Screen Resolutions Service Provider

Rows	Columns	Frame rate	Video Type	Progressive or Interlaced
1080	*1920*	*25*	*25 Hz HD*	*P*
1080	*1920*	*29.97, 30*	*30 Hz HD*	*P*
1080	*1920*	*25*	*25 Hz HD*	*I*
1080	*1920*	*29.97, 30*	*30 Hz HD*	*I*
720	*1280*	*25*	*25 Hz HD*	*P*
720	*1280*	*29.97, 30*	*30 Hz HD*	*P*
720	*1280*	*50*	*50 Hz HD*	*P*
720	*1280*	*59.94, 60*	*60 Hz HD*	*P*

[Provide the connection policies including the URL where the Service Consumer can retrieve the SDP object and the number of simultaneous connections.]

A.5.6 Cross Service Considerations

This section describes interaction between the implementation of different DICOM Services in this product. Details internal to an individual service are addressed in previous Service Sections.

Note: The DICOM Standard typically does not define cross-service requirements. Therefore, this section provides an implementation description and is not strictly required DICOM Conformance.

[Describe any cross-service interactions, e.g., the MPPS COMPLETED message is sent when the archiving of related Instances in the Study is finished. If there are no Cross Service Considerations remove the text above and mark the section as N/A.]

A.5.7 Specific Character Sets

For Specific Character Sets supported in addition to the default character repertoire, refer to Section A.1.7 for the Values for Specific Character Set (0008,0005).

[If your product supports mapping/conversion of the non-default Character Sets, fill in the table below, otherwise remove table and the introductory text below.]

<*Product*> supports mapping/conversion of the supported, non-default Specific Character Sets as listed in Table A.5-165~~Table A.5-165~~.

[Describe how Specific Character Sets that are received by the system are mapped to Specific Character Sets sent out by the system. It does not consider the Character Set used internally within the product. In the "Mapping Situation" column describe the scenario in which this mapping occurs, e.g., when mapping Character Sets from a Modality Worklist entry or a Query Retrieve response to the instances created.]

Table A.5-165: Conversion/Mapping of Non-Default Specific Character Sets

Incoming Specific Character Set			Outgoing Specific Character Set			Mapping Situation
Defined Term	**IANA**	**Description**	**Defined Term**	**IANA**	**Description**	
ISO 2022 IR 87	*ISO-2022-JP*	*Japanese*	*ISO_IR 192*	*UTF-8*	*Unicode in UTF-8*	*Mapping from MWL to instances created*

[Explain your product behavior in case it encounters unsupported character sets.]

[Describe the presentation of the characters to a user, i.e., capabilities, font limitations and/or substitutions of characters.]

Generic configuration for Specific Character Sets is covered in Section 7.8A.6.1~~A.6.1~~. Service specific configuration for Specific Character Sets is addressed in respective subsections of Section 7.8A.6.2~~A.6.2~~ or Section 7.8A.6.3~~A.6.3~~.

A.6 Configuration

[Briefly describe if there is a configuration interface (service tool, administration GUI, web interface, or other) to configure the basic parameters.]

Throughout all subsections the following Values can be used in the “Configurable” column:

- USER: The parameter is configurable by the user.
- SERVICE: The parameter is configurable by service personnel.
- FIXED: The parameter is not configurable (it has a fixed Value). The Value is required for the configuration of the remote system.
- N/A: The parameter is not applicable for the local or the remote system.

A.6.1 General Configuration Parameters

Table A.6-1~~Table A.6-1~~ lists general configuration parameters applicable across all supported DICOM Services.

Table A.6-1: General Configuration Parameters

Parameter	Configurable	Default Value	Comments
[Fill in general parameters related to DICOM connections such as timeouts.]	*<<USER SERVICE FIXED N/A>>*	*[If no default Value, leave it blank.]*	*[Optionally put a comment that would help the reader to understand the configuration/parameter and list Value ranges if applicable.]*
General Parameters			
Timeout waiting for acceptance or rejection Response to an Association Open Request. (Application-Level timeout)			
Timeout waiting for a response to an Association release request (Application Level Timeout)			
General DIMSE level timeout Values			
TCP/IP Settings			
TCP/IP Send Buffer	*SERVICE*	*65535 Bytes*	*Min: 16Kb, Max: 128Kb*
TCP/IP Receive Buffer	*FIXED*	*65535 Bytes*	
DICOM Services Parameters			
Maximum number of simultaneous Associations accepted			
Specific Character Set			*[If character set is configurable per service, add the Specific Character Set configuration row in the relevant services.]*
Other parameters			

A.6.2 Configuration of DIMSE Services

The tables in the following subsections show the configuration parameters required for DIMSE Services.

In order to identify whether <*product*> is an SCP and / or an SCU, the following applies:

- SCP: The (Secured) Local Called AET and Remote Calling AET parameters are present.
- SCU: The (Secured) Local Calling AET and Remote Called AET parameters are present.

[Use this table template in each supported DIMSE Service section, similar to the example tables provided and provide information as needed for the product implementation. “Local Configuration Parameters“ describes

parameters for the product described in this DCS, whereas "Remote Configuration Parameters" describes the information needed for this product to interface with a remote system.

Remove rows for any unsupported parameters. For example, if <product> is an SCU only, remove the rows for Called AE Title and Ports in the Local Configuration Parameters part of the table and the Calling AE Title row in the Remote Configuration Parameters part. If <product> is an SCP only, remove the Calling AE Title row in the Local Configuration Parameters part and remove the rows for the Called AE Title, Ports and Host from the Remote Configuration Parameters part.

If your product implementation supports multiple AE Titles for the same service, list all of them in separate rows and describe their use in the "Comments" column.

Local Configuration Parameters - *<service name>*			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)			
Called AE Title (SCP)			
Port			
TLS-Secured Port			
<Specific service parameter>			
Remote Configuration Parameters - *<service name>*			
[Either document the number of supported remote hosts, e.g <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)			
Called AE Title (SCP)			
Port			
TLS-Secured Port			
Host			
<Specific service parameters>			

]

A.6.2.1 Basic Worklist Management Service Configuration

Table A.6-2~~Table A.6-2~~ lists Worklist Service configuration parameters:

Table A.6-2: Worklist Service Parameters

Local Worklist Configuration Parameters - Worklist Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows configuration for an MWL SCU, e.g., a modality.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*	*WORKLIST_AE*	
Default Modality type	*USER*	*CR*	*Used to query the MWL SCP. Possible choices are CR, DX, RF*

Default Scheduled Station AE Title	*SERVICE*		*Used to query the remote MWL SCP*
Remote Configuration Parameters - Worklist Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Called AE Title (SCP)	*SERVICE*		*Can connect up to 3 RIS*
Port	*SERVICE*	*104*	
TLS-Secured Port	*FIXED*	*2762*	
Host	*SERVICE*		

A.6.2.2 Modality Performed Procedure Step Service Configuration

Table A.6-3~~Table A.6-3~~ lists Modality Performed Procedure Step Service configuration parameters:

Table A.6-3: MPPS Service Parameters

Local Configuration Parameters - MPPS Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows configuration for an MPPS SCU and SCP, e.g., a PACS.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*	*STORE_AE*	*The system uses the same Calling AE Title as for the Storage SCU service by default*
Called AE Title (SCP)	*SERVICE*	*STORE_AE*	*The system uses the same called AE Title as for the Storage SCP service by default*
Port	*FIXED*	*104*	
TLS-Secured Port	*FIXED*	*2762*	
Remote Configuration Parameters - MPPS Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*		
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*	*104*	
TLS-Secured Port	*SERVICE*	*2762*	
Host	*SERVICE*		
Rely on MPPS complete sent by modality	*SERVICE*	*unchecked*	*If checked the PPS will be considered as completed when the modality sends the MPPS N-SET COMPLETED*

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A.6.2.3 Unified Worklist and Procedure Step Service Configuration

Table A.6-4~~Table A.6-4~~**Error! Reference source not found.** ~~-~~lists Unified Worklist and Procedure Step Service configuration parameters:

Table A.6-4: Unified Worklist and Procedure Step Service Parameters

Local Configuration Parameters - Unified Worklist and Procedure Step Service

Parameter	Configurable	Default Value	Comments
[This example shows configuration for an UPS SCU, e.g., a Modality acting as a workitem creator]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling *AE Title* (SCU)	*SERVICE*	*WORKLIST_AE*	
Remote Configuration Parameters - Unified Worklist and Procedure Step Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*	*104*	
TLS-Secured Port	*SERVICE*	*2762*	
Host	*SERVICE*		

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A.6.2.4 Instance Availability Notification Service Configuration

Table A.6-5~~Table A.6-5~~ lists Instance Availability Notification Service configuration parameters:

Table A.6-5: IAN Service Parameters

Local Configuration Parameters - Instance Availability Notification Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows configuration for an IAN SCU, e.g., a PACS.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling *AE Title* (SCU)	*SERVICE*	*IAN_AE*	
Remote Configuration Parameters - Instance Availability Notification Service			
[Either document the number of supported remote hosts, e.g <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*	*104*	
Host	*SERVICE*		

2810 **A.6.2.5 Storage Service Configuration**

Table A.6-6~~Table A.6-6~~ lists Storage Service configuration parameters:

Table A.6-6: Storage Service Parameters

Local Configuration Parameters - Storage Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows the configuration for a Storage SCU and SCP, e.g., a PACS.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling *AE Title* (SCU)	*SERVICE*	*STORE_AE*	
Called *AE Title* (SCP)	*SERVICE*	*STORE_AE*	*List of AE Titles can be configured depending on*

			the usage (study to be verified or not; studies not to be archived; study to be displayed only…)
Port	*FIXED*	*104*	*For studies to be displayed only (not imported in DB/cache, the default port is 110)*
TLS-Secured Port	*FIXED*	*2762*	
Supported Transfer Syntax as SCP	*SERVICE*	*See Table A.1-2~~Table A.1-2~~*	*Can force to accept ILE only*
Supported storage SOP classes as SCP	*SERVICE*	*See Table A.1-1~~Table A.1-1~~*	*Can add or remove storage SOP Classes*
Remote Configuration Parameters - Storage Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*		
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*	*104*	
Host	*SERVICE*		
Inbound PID / issuer to use	*SERVICE*		*In case the remote Storage SCU does not send an issuer of Patient ID, you can define a default inbound Patient ID issuer.*
Outbound Issuer of patient ID default	*SERVICE*		*In case there are several PID/issuers for the study to send, the default PID/issuer can be selected to be sent as the primary Patient ID to the remote storage SCP*

A.6.2.6 Storage Commitment Service Configuration

Table A.6-7~~Table A.6-7~~ lists Storage Commitment Service configuration parameters:

Table A.6-7: Storage Commitment Service Parameters

Local Configuration Parameters - Storage Commitment Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows the for a Storage Commitment SCU and SCP, e.g., a PACS.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*	*STORE_AE*	*The system uses the same Calling AE Title as for the Storage SCU service by default*
Called AE Title (SCP)	*SERVICE*	*STORE_AE*	*The system uses the same Called AE Title as for the Storage SCP service by default*

Port	*SERVICE*	*104*	
TLS-Secured Port	FIXED	*2762*	
Delay to send N-ACTION-RQ	*SERVICE*	*300*	
Delay to send N-EVENT-REPORT-RQ	*FIXED*	*immediately*	*As soon as the N-ACTION-RQ is received the system will initiate an Association to send the N-EVENT-REPORT*
N-EVENT-REPORT on same Association	*FIXED*	*asynchronous*	*When the system receives a N-ACTION, it will open a new Association to send the N-EVENT-REPORT. When the system sends an N-ACTION, it expects to receive the N-EVENT-REPORT in a separate Association.*
Remote Configuration Parameters - Storage commitment Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*		
Called AE Title (SCP)	*SERVICE*		
port	*SERVICE*	*104*	
TLS-Secured Port	*SERVICE*	*2762*	
Host	*SERVICE*		

A.6.2.7 Query/Retrieve Service Configuration

Table A.6-8~~Table A.6-8~~ lists Query/Retrieve Service configuration parameters:

Table A.6-8: Query/Retrieve Service Parameters

Local Configuration Parameters - Query/Retrieve Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows the configuration for a Query / Retrieve SCU and SCP, e.g., a PACS.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling AE Title (SCU)	*SERVICE*	*QUERY_AE*	*The same Calling AET is used for Query and Retrieve*
Called AE Title (SCP)	*SERVICE*	*QUERY_AE*	*The same Called AET is used for Query and Retrieve*
Port	*FIXED*	*104*	
TLS-Secured Port	*FIXED*	*2762*	
Send C-MOVE RSPs with Pending Status to the C-MOVE SCU during the retrieve process	*FIXED*	*5 seconds*	
Remote Configuration Parameters - Query/Retrieve Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*

Calling AE Title (SCU)	*SERVICE*		
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*		
TLS-Secured Port	*SERVICE*		
Host	*SERVICE*		

A.6.2.8 Print Management Service Configuration

Table A.6-9~~Table A.6-9~~ lists Print Management Service configuration parameters:

Table A.6-9: Print Management Service Parameters

Local Configuration Parameters - Print Management Service			
Parameter	**Configurable**	**Default Value**	**Comments**
[This example shows the configuration for a Print SCU, e.g. a modality.]	*<<USER SERVICE FIXED>>*	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Calling *AE Title* (SCU)	*FIXED*	*PRINT_AE*	
Remote Configuration Parameters - Print Management Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Called AE Title (SCP)	*SERVICE*		
Port	*SERVICE*	*104*	
Host	*SERVICE*		
printer template	*SERVICE*		*A pre-defined printer template can be selected in a drop down list. Select "generic" if the printer template does not exist*
Film sizes supported by the Print SCP	*USER*	*All film sizes available*	*Select the film sizes which are relevant for the connected printer*

A.6.3 Configuration of DICOM Web Services

The tables in the following subsections show the configuration parameters required for DICOM Web Services.

To identify whether <*product*> is an origin server and / or a user agent, the following applies:

- Origin server: The (Secured) Local <Transaction Name> URL is present at the local configuration parameters.
- User agent: The (Secured) Remote <Transaction Name> URL is present at the Remote configuration parameters.

["Local Configuration Parameters" describes parameters for the product described in this DCS, whereas "Remote Configuration Parameters" describes the information needed for this product to interface with a remote system. Remove rows for any unsupported parameters]

A.6.3.1 URI Web Service Configuration

Table A.6-10~~Table A.6-10~~ lists the configuration parameters required for URI Web Service.

[Remove the unsupported parameters from the local and remote configuration parameters.]

Table A.6-10: URI Web Service Parameters

Local Configuration Parameters - URI Web Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Local Retrieve Imaging Doc Set URL (Base URI)	*FIXED*	*http://<Localhost>:<port>/wado/*	
Port	*FIXED*	*8080*	
Secured Local Retrieve Imaging Doc Set URL (Base URI)	*FIXED*	*https://<Localhost>:<Securedport>/wado/*	
Secured Port	*FIXED*	*8081*	
<Specific URI web service parameter>			
Remote Configuration Parameters - URI Web Service			
[Either document the number of supported remote hosts, e.g <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.].			
Parameter	**Configurable**	**Default**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Remote Retrieve Imaging Doc Set URL	*SERVICE*		
Port	*SERVICE*		
Secured Remote Retrieve Imaging Doc Set URL	*SERVICE*		
Secured Port	*SERVICE*		
<Specific URI web service parameter>			

A.6.3.2 Studies Web Service Configuration

A.6.3.2.1Retrieve Transaction (WADO-RS) Configuration

The Retrieve Transaction is also known as WADO-RS. Table A.6-11~~Table A.6-11~~ lists configuration parameters for the Retrieve Transaction of the Sudies Web Service:

[Remove the unsupported parameters from the local and remote configuration parameters.]

Table A.6-11: Retrieve Transaction Configuration Parameters

Local Configuration Parameters – Retrieve Transaction			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Local Retrieve Imaging Doc Set URL (Base URI)	*FIXED*	*https://<Localhost>:<port>/wado/*	
port	*SERVICE*	*8081*	
Secured Local Retrieve Imaging Doc Set URL (Base URI)	*FIXED*	*https://<Localhost>:<Securedport>/wado/*	
Secured Port	*SERVICE*		
<Specific Retrieve Transaction parameter>			
Remote Configuration Parameters - Retrieve Transaction			
[Either document the number of supported remote hosts, e.g <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Remote Retrieve Imaging Doc Set URL	*SERVICE*		
Port	*SERVICE*		
Secured Remote Retrieve Imaging Doc Set URL	*SERVICE*		
Secured Port	*SERVICE*		
<Specific Retrieve Transaction parameter>			

A.6.3.2.2 Store Transaction (STOW-RS) Configuration

2850 The Store Transaction is also known as STOW-RS. Table A.6-12~~Table A.6-12~~ lists configuration parameters for the Store Transaction of the Studies Web Service:

[Remove the unsupported parameters from the local and remote configuration parameters.]

Table A.6-12: Store Transaction Parameters

Local Configuration Parameters - Store Transaction			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Store local Origin Server URL (Base URI)	*FIXED*	*http://<hostname>:<port>/stow*	
Port	*SERVICE*	8081	
Secured Store local Origin Server URL (Base URI)	*SERVICE*		
Secured Port	*SERVICE*		

<Specific Store Transaction parameter>			
Remote Configuration Parameters - Store Transaction			
[Either document the number of supported remote hosts, e.g <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Store remote Origin Server URL	*USER*		
Port	*USER*		
Secured Store Remote Origin Server URL	*SERVICE*		
Secured Port	*SERVICE*		
<Specific Store Transaction parameter>			

2855 **A.6.3.2.3 Search Transaction (QIDO-RS) Configuration**

The Search Transaction service is also known as QIDO-RS. Table A.6-13~~Table A.6-13~~ lists configuration parameters for the Search Transaction of the Studies Web Service:

[Remove the unsupported parameters from the local and remote configuration parameters.]

Table A.6-13: Search Transaction Parameters

Local Configuration Parameters - Search Transaction			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Search local Origin Server URL (Base URI)	*FIXED*	*http://<hostname>:<port>/qido*	
Port	*SERVICE*	*8081*	
Secured Search local Origin Server URL (Base URI)		*https://<hostname>:<secured port>/qido*	
Secured Port		*8081*	
<Specific Search Transaction parameter>			
Remote Configuration Parameters - Search Transaction			
[Either document the number of supported remote hosts, e.g. <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than those mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank]*	*[Provide comments or Values/ranges if applicable]*
Search remote Origin Server URL	*SERVICE*		
Port	*SERVICE*		
Secured Search remote Origin Server URL	*SERVICE*		

Secured Port	*SERVICE*		
<Specific Search Transaction parameter>			

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A.6.3.3 Worklist Web Service Configuration

The Worklist Web Service is also known as UPS-RS.

Table A.6-14~~Table A.6-14~~ lists the configuration parameters for the Worklist Web Service.

[Remove the unsupported parameters from the local and remote configuration parameters.]

2865 **Table A.6-14: Worklist Web Service Parameters**

Local Configuration Parameters - Worklist Web Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Worklist local Origin Server URL (Base URI)	*FIXED*	*http://<hostname>:<port>/UPS*	
Port	*SERVICE*	*8081*	
Secured Worklist local Origin Server URL (Base URI)	*FIXED*	*https://<hostname>:<secured port>/UPS*	
Secured Port	*SERVICE*	*8081*	
<Specific Worklist parameter>			
Remote Configuration Parameters - Worklist Web Service			
[Either document the number of supported remote hosts, e.g. <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable]*
Worklist remote Origin Server URL	*SERVICE*		
Port	*SERVICE*		
Secured Worklist remote Origin Server URL	*SERVICE*		
Secured Port	*SERVICE*		
<Specific Worklist parameter>			

A.6.3.4 Non-Patient Instances (NPI) Web Service Configuration

Table A.6-15~~Table A.6-15~~ lists the configuration parameters for the NPI Web Service.

[*Remove the unsupported parameters from the local and remote configuration parameters.]*

2870 **Table A.6-15: NPI Web Service Parameters**

Local Configuration Parameters - NPI Web Service			
Parameter	**Configurable**	**Default Value**	**Comments**

	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
NPI local Origin Server URL (Base URI)	*SERVICE*	*http://<hostname>:8081/NPI*	
Port	*FIXED*	*8081*	
<Specific NPI web service parameter>			
Remote Configuration Parameters - NPI Web Service			
[Either document the number of supported remote hosts, e.g. <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
NPI remote Origin Server URL	*SERVICE*		
Port	*SERVICE*		
Secured NPI remote Origin Server URL	*SERVICE*		
Secured Port	*SERVICE*		
<Specific NPI web service parameter>			

A.6.4 Configuration of Media Storage Service

Table A.6-16~~Table A.6-16~~ lists configuration parameters for the Media Storage service.

Table A.6-16: Media Storage Service Parameters

Local Configuration Parameters - Media Storage Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED>>	*[If there is no default, leave blank.]*	*[Provide comments or Values/ranges if applicable.]*
Source Application Entity Title	*FIXED*	*MEDIA*	
<Specific Media Storage parameter>			

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A.6.5 Configuration of Real Time Video Service

Table A.6-17~~Table A.6-17~~ lists configuration parameters for the Real Time Video service.

Table A.6-17: RTV Service Parameters

Local Configuration Parameters – RTV Service			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED *N/A>>*	*[If there is no default, leave blank.]*	*[Optionally put a comment helping to understand the configuration/parameter, and list Value ranges if applicable.]*

<specific Real Time Video parameter>			
Remote Configuration Parameters – RTV Service			
[Either document the number of supported remote hosts, e.g. <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	**Configurable**	**Default Value**	**Comments**
<specific Real Time Video parameter>			

A.6.6 Configuration of Audit Trail - Syslog

[If your system is only an originator remove the Collector Parameters Table.]

[If your system is only a collector remove the Originator Parameters Table.]

[If your system is both an originator and a collector, keep both tables and indicate if it is a relay.]

Table A.6-18~~Table A.6-18~~ lists configuration parameters for the Audit Trail Originator.

Table A.6-18: Audit Trail Originator Parameters

Originator Audit Trail Message Transmission-SYSLOG Parameters			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED N/A>>	*[If there is no default, leave blank.]*	*[Optionally put in a comment helping a reader to understand the configuration/parameter, and list Value ranges if applicable.]*
Remote Port number	*SERVICE*	*514*	*Can configure multiple remote syslog repository*
Remote secured port number	*SERVICE*	*6514*	
Remote Host name/IP	*SERVICE*		
UDP Protocol	*N/A*		
TLS Protocol	*FIXED*	*TLS*	*only TLS is supported*
Maximum Size sent			
<Specific Originator Audit Trail Message Transmission-SYSLOG parameters>			

Table A.6-19~~Table A.6-19~~ lists configuration parameters for the Audit Trail Collector.

Table A.6-19: Audit Trail Collector Parameters

Collector Audit Trail Message Transmission-SYSLOG Parameters			
Parameter	**Configurable**	**Default Value**	**Comments**
	<<USER SERVICE FIXED N/A>>	*[If there is no default, leave blank.]*	*[Optionally put a comment helping to understand the configuration/parameter, and list Value ranges if applicable.]*
Local Listening Port Number	*SERVICE*	*514*	

Collector Audit Trail Message Transmission-SYSLOG Parameters			
Local Listening Secured port number	*FIXED*	*6514*	
Local Host Name/IP	*SERVICE*		
UDP Protocol	*N/A*		*UDP not supported*
TLS Protocol	*FIXED*	*TLS*	*only TLS is supported*
Maximum Size Received			
<Specific Collector Audit Trail Message Transmission-SYSLOG parameter>			

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A.7 Network and Media Communication Details

A.7.1 General

The cross interaction between the AEs is depicted in the diagrams below.

[Shown below are some examples of cross AE interactions. Modify them to match your product implementation.]

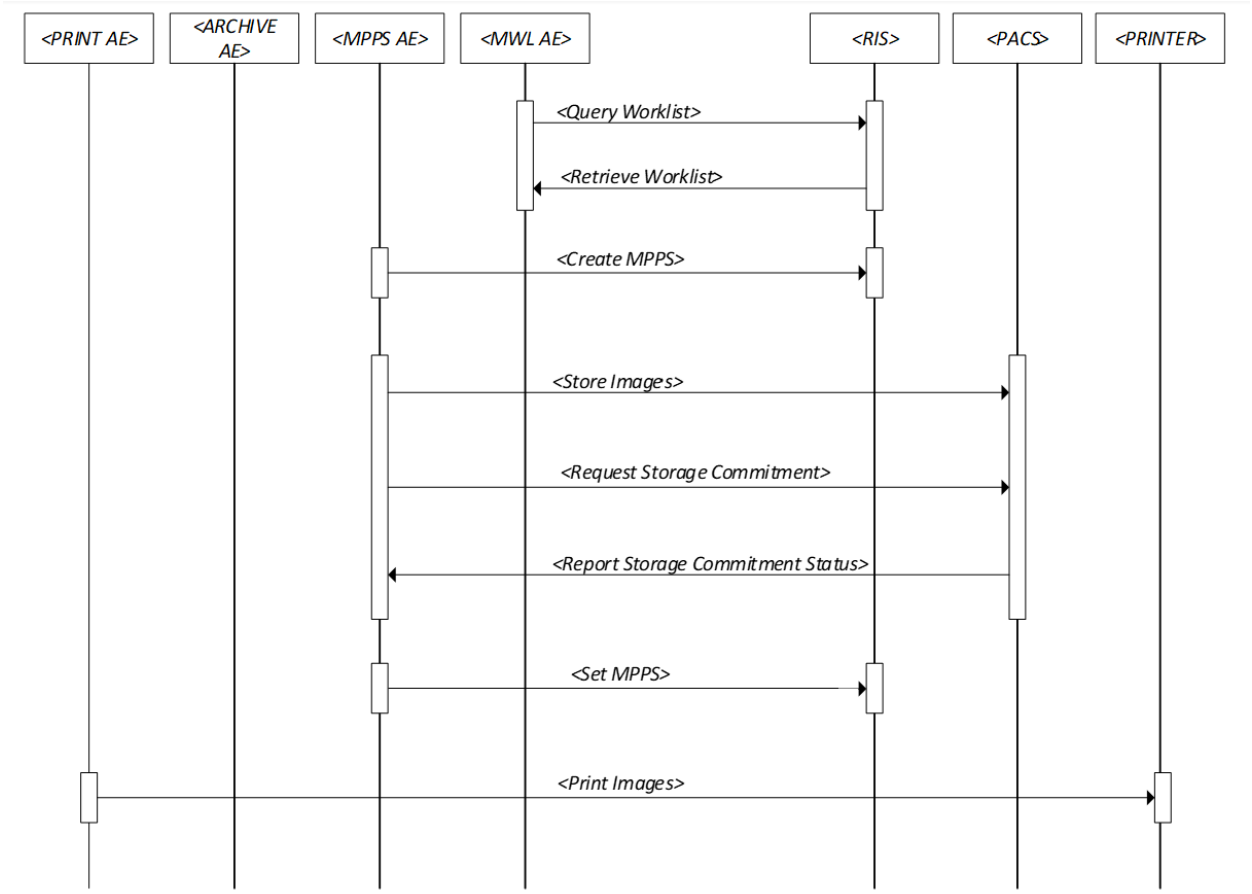

Figure A.7-1: *Real-World Activity and Cross AE interaction*

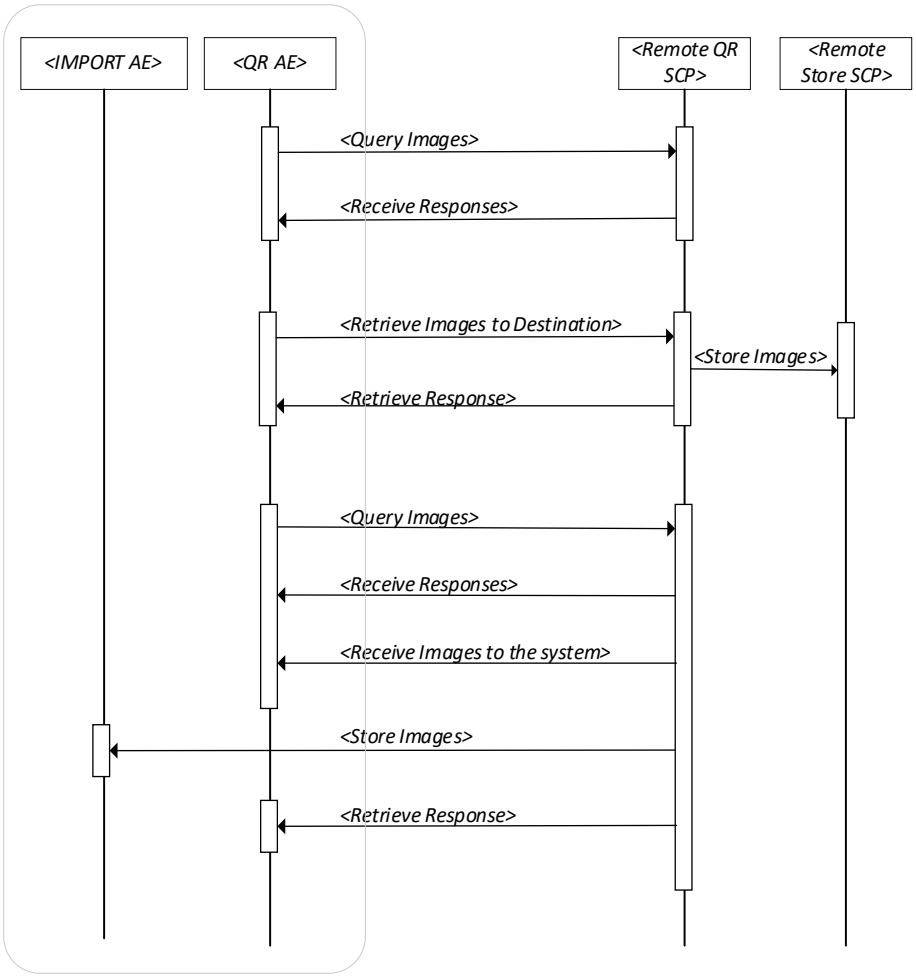

Figure A.7-2: *Real-World Activity and Cross AE interaction – Query Retrieve*

A.7.1.1 General Association Parameters

Table A.7-1~~Table A.7-1~~ lists Association parameters applicable to all AEs on the system.

[If the Association parameters for your system are the same across all AEs, fill in the table below and mark the respective sections for AE specific Association parameters as N/A. If your system uses different Association parameters for each AE replace the content of this section with N/A and append N/A to the section heading.]

Table A.7-1: General Association Parameters

	Name	Value
Networking Services	Application Context Name	1.2.840.10008.3.1.1.1
	Implementation Class UID	
	Implementation Version Name	
	Maximum PDU Length	*Default: 4096*
	ARTIM Timeout	*Default: 30s*
	Maximum number of simultaneous Associations as Association Initiator	

	Maximum number of simultaneous Associations as Association Acceptor	
	Maximum number of outstanding asynchronous Transactions	
Media Services	File Meta Information Version	
	Implementation Class UID	
	Implementation Version Name	
Web Services	Maximum number of connections supported as Server	
<Service Category>	*<Parameter>*	*<Parameter Value>*

A.7.2 Specifications

A.7.2.1 <*AE1*> Application Entity

2910 **A.7.2.1.1Sequencing of Real-World Activities for <AE1>**

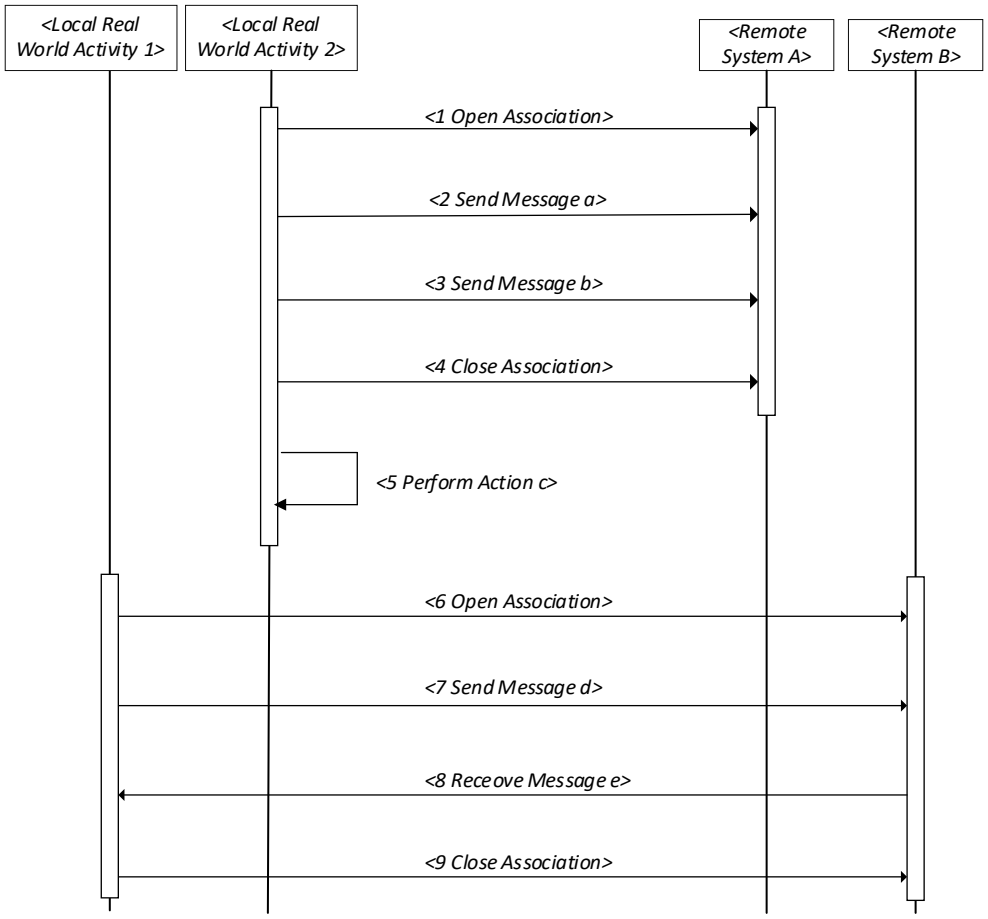

Figure A.7-3: Sequencing of Real-World Activities for <*AE1*>

[Describe the messaging sequence of AE for a Real-World activity that is performed.

E.g.: Local Real-World Activity <2> first open an Association, triggers message <a> and message <b> on this Association before closing it. Action <c> is then performed on the system before Local Real-World Activity <1> can be launched to send message <d> on a new Association and receives message <e> on the same Association.]

[Also include its use of DICOM Web Services, including any proxy functionality between a Web Service and the equivalent DIMSE Service here.

Also include its use of DICOM-RTV Services, including any proxy functionality between a DICOM-RTV and another service provided through DIMSE Service or RESTful (i.e., storage of received video and audio with associated metadata).

Note: This diagram may be split into multiple diagrams to represent each service separately.]

[Below are examples for a Query Retrieve AE and a Web AE. Modify as applicable for your product implementation.]

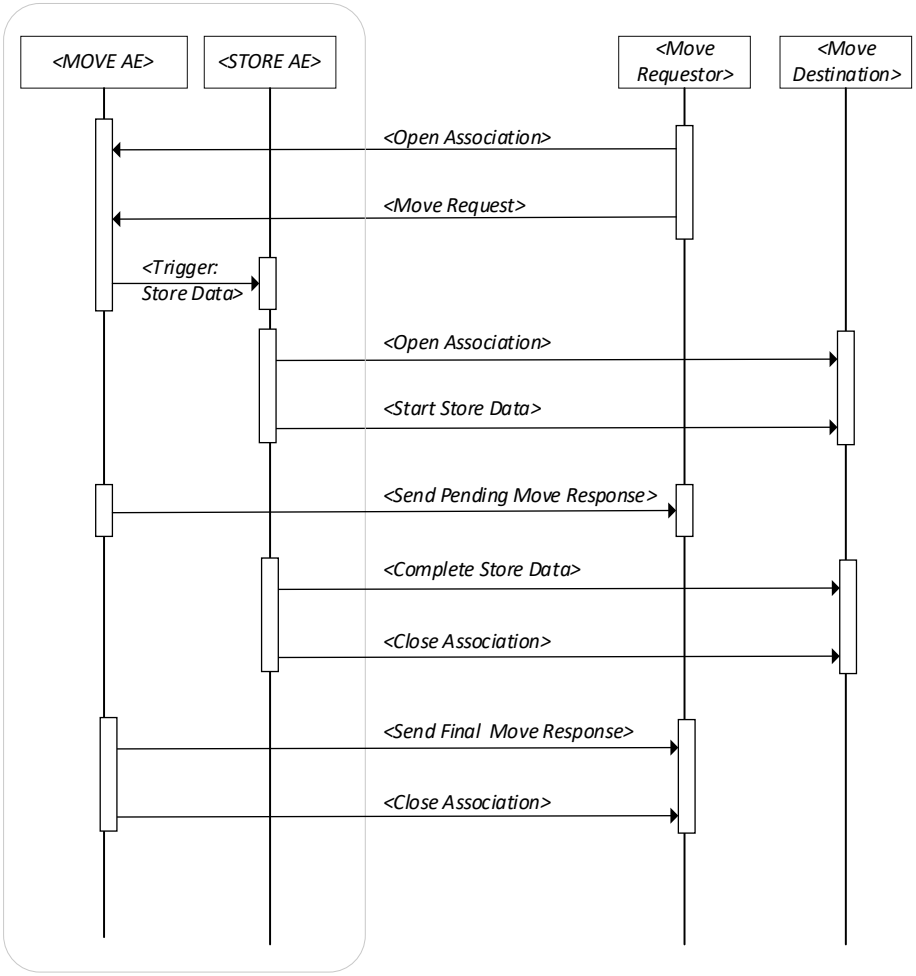

Figure A.7-4: Sequencing of Real-World Activities for <*QueryRetrieve AE*>

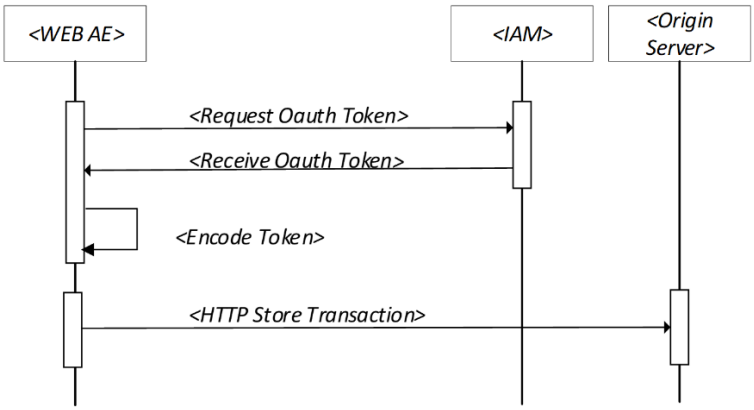

Figure A.7-5: Sequencing of Real-World Activities for *<Web AE>*

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A.7.2.1.2Association Parameters of <AE1>

Table A.7-2~~Table A.7-2~~ lists Association parameters applicable to *<AE1.>*

[If your system uses different Association parameters for each AE fill in the table below for each AE and mark this section as N/A.]

2935 **Table A.7-2: Association Parameters for *<AE1>***

	Name	Value
Networking Services	Application Context Name	1.2.840.10008.3.1.1.1
	Implementation Class UID	
	Implementation Version Name	
	Maximum PDU Length	*Default: 4096*
	ARTIM Timeout	*Default: 30s*
	Maximum number of simultaneous Associations as Association Initiator	
	Maximum number of simultaneous Associations as Association Acceptor	
	Maximum number of outstanding asynchronous Transactions	
Media Services	File Meta Information Version	
	Implementation Class UID	
	Implementation Version Name	
Web Services	Maximum number of connections supported as Server	
<Service Category>	*<Parameter Name>*	*<Parameter Value>*

A.7.2.1.3 Association Initiation

This section details the Association policies of the Application Entity when it is initiating an Association.

[For each Real-World Activity of AE1 provide subsections A.7.2.1.3.x.]

A.7.2.1.3.1 Real-World Activity <Activity1>

[Describe the policies for creating Associations. Include the following details:

- *Policy w.r.t Presentation Context, e.g., a list of transfer syntaxes is proposed for a SOP class of the Storage service when the instances of the SOP class are available only in a certain transfer encoding.]*

[For storage, specify

- *whether all instances are sent on the same Association or whether a new Association request is initiated for each instance.*

- *The Association policy in case Transfer is triggered manually or when transfer occurs automatically (for instance based on C-MOVE)*

[Describe the actions and behavior that cause the product to issue N-ACTION requests and how it relates to the previous storage request, e.g., is the storage commitment initiated right after a successful C-STORE, or is the storage commitment issued after all instance in the study have been successfully stored, …]

[Describe the Association initiation behavior of your product with regards to the N-EVENT-REPORT request, e.g., whether the N-EVENT-REPORT request is sent on the same Association or whether it is initiated on a different Association.]

[Describe your system behavior if your product cannot establish an Association with the SCU, e.g., is there a retry mechanism, is that configurable, …]

Extended Negotiation

The Extended Negotiation parameters for all services that are supported by the Application Entity for the Real-World Activity <*Activity 1*> are described in Table A.7-3~~Table A.7-3~~ .

[Describe below all the Extended Negotiation that the Application Entity requests for the <Activity 1> during Association negotiation. Use "Y" in the "Support" column to indicate support for Extended Negotiation or "N" to indicate that Extended Negotiation is not supported, and the default Value is sent in the Association field. Describe any behavior pertaining to handling extended behavior during Association initiation under this section.]

[Modify the table below to reflect the services participating in <Activity 1>.]

Table A.7-3: Extended Negotiation for <*Activity1*> of <*AE1*> - Association Initiation

SOP Class	Extended Negotiation	Support	Requested Value
Modality Worklist			
Modality Worklist Information Model – FIND	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*
Storage			
Applicable to all storage SOP Classes listed under Section A.5.	Level of support		*<3>*
	Level of Digital Signature support		*<(0),1,2,3>*
	Element Coercion		*<0,1,(2) >*
Query			
	Relational queries		*<0,1>*
	Date-time matching		*<0,1>*

Applicable to all Query Retrieve – FIND SOP Classes mentioned under Section A.5.	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*
	Enhanced Multi-Frame Image Conversion		*<0,1>*
Retrieve			
Applicable to all Query Retrieve – MOVE SOP Classes mentioned under Section A.5.	Relational retrieval		*<0,1>*
	Enhanced Multi-Frame Image Conversion		*<0,1>*
	Timezone query adjustment		*1*
Unified Worklist and Procedure Step			
Unified Worklist and Procedure Step	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*

Role Negotiation

[Describe if the AE supports Role Negotiation in the case of Storage commitment happening synchronously i.e. if the N-ACTION and the N-EVENT-REPORT are performed in the same Association.]

A.7.2.1.4 Association Acceptance

This section details the Association policies of the Application Entity when it is the acceptor of an Association.

[For each Real-World Activity of AE1 provide subsections A.7.2.1.4.x.]

A.7.2.1.4.1 Real-World Activity <Activity2>

[Describe the service specific Association acceptance behavior of your product, e.g.

- *For storage commitment describe whether an N-EVENT-REPORT request is expected on the same Association or whether it is expected on a different Association.]*

Extended Negotiation

The Extended Negotiation parameters for all services that are requested by the Application Entity for the Real-World Activity <*Activity 2*> are described in Table A.7-4~~Table A.7-4~~.

[Describe below all the Extended Negotiation that the Application Entity supports for <Activity2> during Association negotiation. Use "Y" in the "Support" column to indicate support for Extended Negotiation or "N" to indicate that Extended Negotiation is not supported, and the default Value is sent in the Association field. Describe any behavior pertaining to handling extended behavior during Association acceptance under this section.]

[Modify the table below to reflect the services participating in <Activity 2>.]

Table A.7-4: Extended Negotiation for <*Activity 2*> of <*AE1*> - Association Acceptance

SOP Class	Extended Negotiation	Support	Requested Value
Modality Worklist			
Modality Worklist Information Model – FIND (1.2.840.10008.5.1.4.31)	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*
Storage			

Applicable to all storage SOP Classes listed under Section A.5.	Level of support		*<0,1,2,(3) >*
	Level of Digital Signature support		*<(0),1,2,3>*
	Element Coercion		*<0,1,(2) >*
Query			
Applicable to all Query Retrieve – FIND SOP Classes mentioned under Section A.5.	Relational queries		*<0,1>*
	Date-time matching		*<0,1>*
	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*
	Enhanced Multi-Frame Image Conversion		*<0,1>*
Retrieve			
Applicable to all Query Retrieve – MOVE SOP Classes mentioned under Section A.5.	Relational retrieval		*<0,1>*
	Enhanced Multi-Frame Image Conversion		*<0,1>*
	Timezone query adjustment		*<1>*
Unified Worklist and Procedure Step			
Unified Worklist and Procedure Step	Fuzzy semantic matching of person names		*<0,1>*
	Timezone query adjustment		*<0,1>*

Transfer Syntax Selection Policies

This section provides tables that describe the Transfer Syntax preference for different SOP Classes or SOP Class groups when there are multiple Transfer Syntaxes provided by the Association initiator for Real-World Activity <*Activity 2*> of <*AE1*> of the system.

[The preference for Transfer Syntax selection is based on the type of data i.e. Image SOP Classes, Video SOP Classes or non-image/video SOP Classes.]

[Edit the tables below to indicate the transfer selection polices applicable to the documented activity.

If there are exceptions to the standard preference SOP Classes, mention this in the "Comments" column.

If the preference order is based on some other criteria, add another table.]

Table A.7-5: Transfer Syntax Selection Preference Order - Image SOP Classes for <*AE1*>

Preference Order	Transfer Syntax	UID	Comments
1	*JPEG Lossless, Hierarchical, First-Order Prediction Transfer Syntax*	*1.2.840.10008.1.2.4.70*	
2	*RLE Lossless*	*1.2.840.10008.1.2.5*	
3	*Explicit VR Little-Endian Transfer Syntax*	*1.2.840.10008.1.2.1*	
4	*Implicit VR Little-Endian Transfer Syntax*	*1.2.840.10008.1.2*	
5	*Explicit VR Big-Endian Transfer Syntax*	*1.2.840.10008.1.2.2*	

Table A.7-6: Transfer Syntax Selection Preference Order - Video SOP Classes for *<AE1>*

Preference Order	Transfer Syntax	UID	Comments
1	*MPEG2 Main Profile / Main Level*	*1.2.840.10008.1.2.4.100*	
2	*MPEG-4 AVC/H.264 Stereo High Profile / Level 4.2*	*1.2.840.10008.1.2.4.106*	
3	*Explicit VR Little-Endian Transfer Syntax*	*1.2.840.10008.1.2.1*	
4	*Implicit VR Little-Endian Transfer Syntax*	*1.2.840.10008.1.2*	
5	*Explicit VR Big-Endian Transfer Syntax*	*1.2.840.10008.1.2.2*	

3000 **Table A.7-7: Transfer Syntax Selection Preference Order – Non-Image SOP Classes for *<AE1>***

Preference Order	Transfer Syntax	UID	Comments
1	*Explicit VR Little-Endian Transfer Syntax*	*1.2.840.10008.1.2.1*	
2	*Implicit VR little-Endian Transfer Syntax*	*1.2.840.10008.1.2*	
3	*Explicit VR Big-Endian Transfer Syntax*	*1.2.840.10008.1.2.2*	

A.7.3 Status Codes

The following sections describe the Status Codes supported by the system for each implemented service as well as the reason for issuing specific Status codes or the associated behavior when receiving it.

[Throughout all SCP related Subsections, if necessary provide in the "Condition" Column further information (beyond the information in the "Further Meaning" Column) on the specific situation/condition, in which the respective Status Code is sent. E.g. for the Status Code

- *"A700 – Refused: Out of Resource" document details whether there is no space in the database, or on the hard drive, …*
- *"0110 Processing Failure document the nature of the processing failure.]*

A.7.3.1 General AE Communication and Failure Behavior and Handling

A.7.3.1.1 Communication Failure Behavior as Association Initiator

Table A.7-8~~Table A.7-8~~ describes behavior of the AE if a communication failure occurs when it initiated an Association.

[Describe below the behavior of the AE if a communication failure occurs when it initiated an Association, e.g.: Timeout, Network disconnect ABORT etc.]

Table A.7-8:DICOM Communication Failure Behavior as Association Initiator

Failure	Failure Behavior
Timeout	*[Describe what the Application Entity does, if it does not receive any messages after the Association request and times out, e.g.,]* *The Association is aborted using A-ABORT and command marked as failed. The reason is logged and reported to the user.*
Association aborted	*[Describe what the Application Entity does if an ABORT happens during the Association, e.g.,]* *The command is marked as failed. The reason is logged and reported to the user.*
Network Disconnect	*[Describe what an Application Entity does if the network is disconnected during Association, e.g.,]* *The command is marked as failed. The reason is logged and reported to the user. Automatic retry of this service connection is started*

A.7.3.1.2 Communication Failure Handling as Association Acceptor

Table A.7-9~~Table A.7-9~~ describes how the AE responds when it receives an Association request that leads to a failure in communication.

[Describe how the AE responds when it receives Association requests that leads to a failure in communication: application error during processing, unrecognized PDU values in the Association request etc. List all cases supported by the product.]

Table A.7-9: DICOM Communication Failure Handling as Association Acceptor

Exception	Failure response
Failure during processing of an Association request	*[Describe what the AE does if there is an internal error during processing of an Association request, e.g.,]* *ABORT message is sent out and the connection is closed*
Unrecognized Called AE	*[Describe what the AE does if the Called AE is not recognized*, e.g.,] *AE responds with Association-RJ*
Exceed limit for number of connections supported	*[Describe what the AE does if it receives a new Association request if the limit of connections supported by the AE is exceeded, e.g.,]* *AE responds with Association-RJ*

A.7.3.2 DIMSE Services

A.7.3.2.1 Basic Worklist Management Service

A.7.3.2.1.1 SCU of the Modality Worklist Information Model Find SOP Class - C-FIND

Table A.7-10~~Table A.7-10~~ lists the Status Codes that the SCU of the Modality Worklist Information Model Find SOP Class supports for the C-FIND message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-10: Status Codes for C-FIND of the Modality Worklist Information Model SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	SOP Class Not Supported	0122	
	Error: Identifier does not match SOP Class	A900	
	Error: Unable to process	C000-CFFF	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	
-	Other status codes	anything else	

A.7.3.2.1.2 SCP of the Modality Worklist Information Model Find SOP Class - C-FIND

Table A.7-11~~Table A.7-11~~ lists the Status Codes that the SCP of the Modality Worklist Information Model Find SOP Class supports for the C-FIND message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-11: Status Codes for C-FIND of the Modality Worklist Information Model SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	SOP Class Not Supported	0122	
	Error: Identifier does not match SOP Class	A900	
	Error: Unable to process	C000-CFFF	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	

A.7.3.2.2 Modality Performed Procedure Step Service

A.7.3.2.2.1 SCU of the Modality Performed Procedure Step SOP Class - N-CREATE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

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Table A.7-12~~Table A.7-12~~ lists the Status Codes that the SCU of the Modality Performed Procedure Step SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-12: Status Codes for N-CREATE of the Modality Performed Procedure Step SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Attribute Value Out of Range	0116	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.2.2 SCU of the Modality Performed Procedure Step SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-13~~Table A.7-13~~ lists the Status Codes that the SCU of the Modality Performed Procedure Step SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-13: Status Codes for N-SET of the Modality Performed Procedure Step SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute Value Out of Range	0116	

Service Status	Further Meaning	Status Code	Behavior
	Attribute List Error	0107	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure - Performed Procedure Step Object may no longer be updated	0110	
	Processing Failure	0110	
	Attribute Value Out of Range	0116	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.2.3 SCP of the Modality Performed Procedure Step SOP Class - N-CREATE

Table A.7-14~~Table A.7-14~~ lists the Status Codes that the SCP of the Modality Performed Procedure Step SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-14: Status Codes for N-CREATE of the Modality Performed Procedure Step SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	Duplicate Invocation	0210	
	Duplicate SOP Instance	0111	
	Invalid Attribute Value	0106	
	Attribute Value Out of Range	0116	
	Invalid Object Instance	0117	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Mistyped Argument	0212	
	No Such Attribute	0105	

Service Status	Further Meaning	Status Code	Condition
	No Such SOP Class	0118	
	Processing Failure	0110	
	Resource Limitation	0213	
	Unrecognized Operation	0211	
	Refused: Not Authorized	0124	

A.7.3.2.2.4 SCP of the Modality Performed Procedure Step SOP Class - N-SET

Table A.7-15~~Table A.7-15~~ lists the Status Codes that the SCP of the Modality Performed Procedure Step SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-15: Status Codes for N-SET of the Modality Performed Procedure Step SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure - Performed Procedure Step Object may no longer be updated	0110	
	Processing Failure	0110	
	Attribute Value Out of Range	0116	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.2.3 Unified Worklist und Procedure Step Service

A.7.3.2.3.1 SCU of the UPS Push SOP Class

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SCU of the UPS Push SOP Class - N-CREATE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-16~~Table A.7-16~~ lists the Status Codes that the SCU of the UPS Push SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-16: Status Codes for N-CREATE of the UPS Push SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	The UPS was created as requested	0000	
Warning	The UPS was created with modifications	B300	
	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	Duplicate invocation	0210	
	No such Attribute	0105	
	Invalid Attribute Value	0106	
	Attribute List Error	0107	
	Processing failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Unrecognized operation	0211	
	Mistyped argument	0212	
	Resource limitation	0213	
	Failed: The provided Value of UPS State was not "SCHEDULED".	C309	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Push SOP Class Request UPS Cancel - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-17~~Table A.7-17~~ lists the Status Codes that the SCU of the Request UPS Cancel on UPS Push SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-17: N-ACTION of the UPS Push SOP Class Request UPS Cancel - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	The cancel request is acknowledged	0000	
Warning	The UPS is already in the requested state of CANCELED	B304	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is already COMPLETED	C311	
	Failed: Performer chooses not to cancel	C313	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The performer cannot be contacted	C312	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Push SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-18~~Table A.7-18~~ lists the Status Codes that the SCU of the UPS Push SOP Class supports for the N-GET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-18: Status Codes for N-GET of the UPS Push SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
Failure	Class-instance conflict	0119	
	Attribute List error	0107	
	Duplicate invocation	0210	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
-	Other status codes	anything else	

A.7.3.2.3.2SCU of the UPS Pull SOP Class

Format the following line as a heading level 7

SCU of the UPS Pull SOP Class - C-FIND

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-19~~Table A.7-19~~ lists the Status Codes that the SCU of the UPS Pull SOP Class supports for the C-FIND message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-19: Status Codes for C-FIND of the UPS Pull SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Failed: Unable to process	C000-CFFF	
	Failed: SOP Class Not Supported	0122	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Pull SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-20~~Table A.7-20~~ lists the Status Codes that the SCU of the UPS Pull SOP Class supports for the N-GET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-20: Status Codes for N-GET of the UPS Pull SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
Failure	Class-instance conflict	0119	
	Attribute List error	0107	
	Duplicate invocation	0210	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Pull SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-21~~Table A.7-21~~ lists the Status Codes that the SCU of the UPS Pull SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

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[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-21: Status Codes for N-SET of the UPS Pull SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
	Coerced invalid Values to valid Values	B305	
	Attribute Value Out of Range	0116	
	Attribute List error	0107	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid Attribute Value	0106	
	Mistyped argument	0212	
	Missing Attribute Value	0121	
	No such Attribute	0105	
	Attribute List error	0107	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is not in the "IN PROGRESS" state	C310	
	Failed: The correct Transaction UID was not provided	C301	
	Failed: The UPS may no longer be updated	C300	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Change UPS State of UPS Pull SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-22~~Table A.7-22~~ lists the Status Codes that the SCU of the Change UPS State of UPS Pull SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-22: Status Codes for N-ACTION of the UPS Pull SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	The requested state change was performed	0000	
Warning	The UPS is already in the requested state of CANCELED	B304	
	The UPS is already in the requested state of COMPLETED	B306	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS may no longer be updated	C300	
	Failed: The correct Transaction UID was not provided	C301	
	Failed: The UPS is already IN PROGRESS	C302	

Service Status	Further Meaning	Status Code	Behavior
	Failed: The UPS may only become SCHEDULED via N-CREATE, not N-SET or N-ACTION	C303	
	Failed: The UPS has not met final state requirements for the requested state change	C304	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The UPS is not yet in the "IN PROGRESS" state	C310	
-	Other status codes	anything else	

A.7.3.2.3.3 SCU of the UPS Watch SOP Class

Format the following line as a heading level 7

SCU of the Un/Subscribe on UPS Watch SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-23~~Table A.7-23~~ lists the Status Codes that the SCU of the Un/Subscribe of the UPS Watch SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-23: Status Codes for N-ACTION (subscribe/unsubscribe) of the UPS Watch SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	The requested change of subscription state was performed	0000	
Warning	Deletion Lock not granted.	B301	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	

Service Status	Further Meaning	Status Code	Behavior
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: Receiving AE-TITLE is Unknown to this SCP	C308	
	Failed: Specified action not appropriate for specified instance	C314	
	Failed: SCP does not support Event Reports	C315	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Watch SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-24~~Table A.7-24~~ lists the Status Codes that the SCU of the UPS Watch SOP Class supports for the N-GET message and defines the application behavior when encountering any the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-24: Status Codes for N-GET of the UPS Watch SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	

Service Status	Further Meaning	Status Code	Behavior
Warning	Requested optional Attributes are not supported.	0001	
Failure	Class-instance conflict	0119	
	Attribute List error	0107	
	Duplicate invocation	0210	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the UPS Watch SOP Class - C-FIND

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-25~~Table A.7-25~~ lists the Status Codes that the SCU of the UPS Watch SOP Class supports for the C-FIND message and defines the application behavior when encountering the listed Status Codes.

[[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-25: Status Codes for C-FIND of the UPS Watch SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Matching is complete - No final identifier is supplied	0000	

Service Status	Further Meaning	Status Code	Behavior
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Failed: Unable to process	C000-CFFF	
	Failed: SOP Class Not Supported	0122	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Request UPS Cancellation on UPS Watch SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-26~~Table A.7-26~~ lists the Status Codes that the SCU of the Request UPS Cancellation on UPS Watch SOP Class supports for the C-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-26: Status Codes for N-ACTION (request cancel) of the UPS Watch SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	The cancel request is acknowledged	0000	

Service Status	Further Meaning	Status Code	Behavior
Warning	The UPS is already in the requested state of CANCELED	B304	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is already COMPLETED	C311	
	Failed: Performer chooses not to cancel	C313	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The performer cannot be contacted	C312	
-	Other status codes	anything else	

A.7.3.2.3.4 SCU of the UPS Event SOP Class

Format the following line as a heading level 7

SCU of the UPS Event SOP Class - N-EVENT-REPORT

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-27~~Table A.7-27~~ lists the Status Codes that the SCU of the UPS Event SOP Class supports for the N-EVENT-REPORT message and defines the application behavior when encountering the listed Status Codes.

Formatte

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-27: Status Codes for the N-EVENT-REPORT of the UPS Event SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success		0000	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	Mistyped argument	0212	
	No such event type	0113	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
-	Other status codes	anything else	

A.7.3.2.3.5 SCP of the UPS Push SOP Class

Format the following line as a heading level 7

SCP of the UPS Push SOP Class - N-CREATE

Table A.7-28~~Table A.7-28~~ lists the Status Codes that the SCP of the UPS Push SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-28: Status Codes for N-CREATE of the UPS Push SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	The UPS was created as requested	0000	
Warning	The UPS was created with modifications	B300	
	Attribute Value out of Range	0116	
	Attribute List Error	0107	

Service Status	Further Meaning	Status Code	Condition
Failure	Duplicate invocation	0210	
	Duplicate SOP Instance	0111	
	Invalid Attribute Value	0106	
	Invalid Object Instance	0117	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Mistyped argument	0212	
	No such Attribute	0105	
	No such SOP Class	0118	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The provided Value of UPS State was not "SCHEDULED".	C309	

Format the following line as a heading level 7

SCP of Request UPS Cancel on UPS Push SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-29~~Table A.7-29~~ lists the Status Codes that the SCP of the UPS Push SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-29: Status Codes for N-ACTION (request cancel) of the UPS Push SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	The cancel request is acknowledged	0000	
Warning	The UPS is already in the requested state of CANCELED	B304	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	

Service Status	Further Meaning	Status Code	Condition
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is already COMPLETED	C311	
	Failed: Performer chooses not to cancel	C313	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The performer cannot be contacted	C312	

Format the following line as a heading level 7

SCP of the UPS Push SOP Class - N-GET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-30~~Table A.7-30~~ lists the Status Codes that the SCP of the UPS Push SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-30: Status Codes for N-GET of the UPS Push SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
	Attribute List error	0107	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Mistyped argument	0212	

Service Status	Further Meaning	Status Code	Condition
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	

A.7.3.2.3.6 SCP of the UPS Pull SOP Class

Format the following line as a heading level 7

SCP of the UPS Pull SOP Class - C-FIND

Table A.7-31~~Table A.7-31~~ lists the Status Codes that the SCP of the UPS Pull SOP Class supports for the C-FIND message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-31: Status Codes C-FIND of the UPS Pull SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Matching is complete - No final identifier is supplied	0000	
Cancel	Matching terminated due to cancel	FE00	
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Failed: Unable to process	C000-CFFF	
	Failed: SOP Class Not Supported	0122	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not	FF01	

Service Status	Further Meaning	Status Code	Condition
	supported for existence for this Identifier		

Format the following line as a heading level 7

SCP of the UPS Pull SOP Class - N-GET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-32~~Table A.7-32~~ lists the Status Codes that the SCP of the UPS Pull SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-32: Status Codes for N-GET of the UPS Pull SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
	Attribute List error	0107	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	

Format the following line as a heading level 7

SCP of the UPS Pull SOP Class - N-SET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-33~~Table A.7-33~~ lists the Status Codes that the SCP of the UPS Pull SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-33: Status Codes for N-SET of the UPS Pull SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
	Attribute Value Out of Range	0116	
	Attribute List error	0107	
	Coerced invalid Values to valid Values	B305	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid Attribute Value	0106	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	Missing Attribute Value	0121	
	No such Attribute	0105	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is not in the "IN PROGRESS" state	C310	
	Failed: The correct Transaction UID was not provided	C301	
	Failed: The UPS may no longer be updated	C300	
	Failed: Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	

Format the following line as a heading level 7

SCP of the Change UPS State of UPS Pull SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-34~~Table A.7-34~~ lists the Status Codes that the SCP of the Change UPS State of the UPS Pull SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-34: Status Codes for N-ACTION (change state) of the UPS Pull SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	The requested state change was performed	0000	
Warning	The UPS is already in the requested state of CANCELED	B304	
	The UPS is already in the requested state of COMPLETED	B306	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS may no longer be updated	C300	
	Failed: The correct Transaction UID was not provided	C301	
	Failed: The UPS is already IN PROGRESS	C302	
	Failed: The UPS may only become SCHEDULED via N-CREATE, not N-SET or N-ACTION	C303	

Service Status	Further Meaning	Status Code	Condition
	Failed: The UPS has not met final state requirements for the requested state change	C304	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The UPS is not yet in the "IN PROGRESS" state	C310	

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A.7.3.2.3.7SCP of the UPS Watch SOP Class

Format the following line as a heading level 7

SCP of the Un/Subscribe on UPS Watch SOP Class - N-ACTION

Table A.7-35~~Table A.7-35~~ lists the Status Codes that the SCP of the Un/Subscribe on the UPS Watch SOP Class
3555 supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-35: Status Codes for N-ACTION (Un/subscribe)) of the UPS Watch SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	The requested change of subscription state was performed	0000	
Warning	Deletion Lock not granted.	B301	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a	C307	

Service Status	Further Meaning	Status Code	Condition
	UPS Instance managed by this SCP		
	Failed: Receiving AE-TITLE is Unknown to this SCP	C308	
	Failed: Specified action not appropriate for specified instance	C314	
	Failed: SCP does not support Event Reports	C315	

Format the following line as a heading level 7

SCP of the UPS Watch SOP Class - N-GET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-36~~Table A.7-36~~ lists the Status Codes that the SCP of the UPS Watch SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-36: Status Codes for N-GET of the UPS Watch SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Requested optional Attributes are not supported.	0001	
	Attribute List error	0107	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Mistyped argument	0212	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: Specified SOP Instance UID does not exist or is not a	C307	

Service Status	Further Meaning	Status Code	Condition
	UPS Instance managed by this SCP		

Format the following line as a heading level 7

SCP of the UPS Watch SOP Class - C-FIND

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-37~~Table A.7-37~~ lists the Status Codes that the SCP of the UPS Watch SOP Class supports for the C-FIND message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-37: Status Codes C-FIND of the UPS Watch SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Failed: Unable to process	C000-CFFF	
	Failed: SOP Class Not Supported	0122	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	

Format the following line as a heading level 7

SCP of the Request UPS Cancellation on UPS Watch SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-38~~Table A.7-38~~ lists the Status Codes that the SCP of the Request UPS Cancellation on UPS Watch SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-38: Status Codes for N-ACTION (cancel request) of the UPS Watch SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	The cancel request is acknowledged	0000	
Warning	The UPS is already in the requested state of CANCELED	B304	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	Mistyped argument	0212	
	No such action	0123	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	
	Refused: Not Authorized	0124	
	Failed: The UPS is already COMPLETED	C311	
	Failed: Performer chooses not to cancel	C313	
	Specified SOP Instance UID does not exist or is not a UPS Instance managed by this SCP	C307	
	Failed: The performer cannot be contacted	C312	

A.7.3.2.3.8 SCP of the UPS Event SOP Class

Format the following line as a heading level 7

SCP of the UPS Event SOP Class - N-EVENT-REPORT

Table A.7-39~~Table A.7-39~~ lists the Status Codes that the SCP of the UPS Event SOP Class supports for the N-EVENT-REPORT message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-39: Status Codes for N-EVENT-REPORT of the UPS Event SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success		0000	
Warning	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	Mistyped argument	0212	
	No such event type	0113	
	No such argument	0114	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	

A.7.3.2.4 Instance Availability Notification Service

A.7.3.2.4.1 SCU of the Instance Availability Notification SOP Class - N-CREATE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-40~~Table A.7-40~~ lists the Status Codes that the SCU of the Instance Availability Notification SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-40: Status Codes for N-CREATE for the Instance Availability Notification SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	No such Attribute	0105	
	Invalid Attribute Value	0106	

Service Status	Further Meaning	Status Code	Behavior
	Attribute List Error	0107	
	Processing failure	0110	
	Duplicate SOP Instance	0111	
	Attribute Value Out of Range	0116	
	Invalid Object Instance	0117	
	No such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate invocation	0210	
	Unrecognized operation	0211	
	Mistyped argument	0212	
	Resource limitation	0213	
-	Other status codes	anything else	

A.7.3.2.4.2 SCP of the Instance Availability Notification SOP Class - N-CREATE

Table A.7-41~~Table A.7-41~~ lists the Status Codes that the SCP of the Instance Availability Notification SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-41: Status Codes for N-CREATE for the Instance Availability Notification SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Class-instance conflict	0119	
	Duplicate invocation	0210	
	Duplicate SOP Instance	0111	
	Invalid Attribute Value	0106	
	Invalid Object instance	0117	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Mistyped argument	0212	
	No such Attribute	0105	
	No such SOP Class	0118	
	No such SOP Instance	0112	
	Processing failure	0110	
	Resource limitation	0213	
	Unrecognized operation	0211	

A.7.3.2.5 Storage Service

A.7.3.2.5.1 SCU of the Storage SOP Classes - C-STORE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-42~~Table A.7-42~~ lists the Status Codes that the SCU of the Storage SOP Class supports for the C-STORE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-42: Status Codes C-STORE for the Storage SOP Classes - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Coercion of Data Elements	B000	
	Data Set does not match SOP Class	B007	
	Elements Discarded	B006	
Failure	SOP Class not supported	0112	
	Invalid Object Instance	0117	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Not authorized	0214	
	Out of Resources	A700-A7FF	
	Data Set does not match SOP Class	A900-A9FF	
	Cannot Understand	C000-CFFF	
-	Other status codes	anything else	

A.7.3.2.5.2 SCP of the Storage SOP Classes - C-STORE

Table A.7-43~~Table A.7-43~~ lists the Status Codes that the SCP of the Storage SOP Classes supports for the C-STORE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

[List the Attributes that are used to further detail the Status Codes in the "Related Fields Columns". Use N/A if there are no related fields used.Further comments regarding the Related Fields can be provided in the "Condition" Column]

Table A.7-43: Status Codes C-STORE of the Storage SOP Classes - SCP

Service Status	Further Meaning	Status Codes	Related Fields	Condition (and Comments on Related fields)
Success	Success	0000		
Warning	Coercion of Data Elements	B000		
	Data Set does not match SOP Class	B007		
	Elements Discarded	B006		
Refused	Refused: Out of Resources	A700		
Failure	Error: Data Set does not match SOP Class	A901		
	Error: Cannot understand	C000		

A.7.3.2.6 Storage Commitment Service

A.7.3.2.6.1 SCU of the Storage Commitment Push Model SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-44~~Table A.7-44~~ lists the Status Codes that the SCU of the Storage Commitment Push Model SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-44: Status Codes for N-ACTION of the Storage Commitment Push Model SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success		0000	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No such argument	0114	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	Class-instance conflict	0119	
	No such action	0123	
	Refused: Not Authorized	0124	
	Duplicate invocation	0210	

Service Status	Further Meaning	Status Code	Behavior
	Unrecognized operation	0211	
	Mistyped argument	0212	
	Resource limitation	0213	
-	Other status codes	anything else	

A.7.3.2.6.2 SCU of the Storage Commitment Push Model SOP Class - N-EVENT-REPORT

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-45~~Table A.7-45~~ lists the Status Codes that the SCU of the Storage Commitment Push Model SOP Class supports for the N-EVENT-REPORT message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-45: Status Codes for N-EVENT-REPORT for the Storage Commitment Push Model SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success		0000	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No such argument	0114	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	Class-instance conflict	0119	
	No such action	0123	
	Refused: Not Authorized	0124	
	Duplicate invocation	0210	
	Unrecognized operation	0211	
	Mistyped argument	0212	
-	Other status codes	anything else	

A.7.3.2.6.3SCP of the Storage Commitment Push Model SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-46~~Table A.7-46~~ lists the Status Codes that the SCP of the Storage Commitment Push Model SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-46: Status Codes for N-ACTION for the Storage Commitment Push Model SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success		0000	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No such argument	0114	
	Invalid argument Value	0115	
	Invalid Object instance	0117	
	No such SOP Class	0118	
	Class-instance conflict	0119	
	No such action	0123	
	Refused: Not Authorized	0124	
	Duplicate invocation	0210	
	Unrecognized operation	0211	
	Mistyped argument	0212	
	Resource limitation	0213	

A.7.3.2.6.4 SCP of the Storage Commitment Push Model SOP Class - N-EVENT-REPORT

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-47~~Table A.7-47~~ lists the Status Codes that the SCP of the Storage Commitment Push Model SOP Class supports for the N-EVENT-REPORT message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-47: Status Codes for N-EVENT-REPORT for the Storage Commitment Push Model SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success		0000	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No such event type	0113	
	No such argument	0114	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	No such SOP Class	0118	
	Class-instance conflict	0119	

Service Status	Further Meaning	Status Code	Condition
	Duplicate invocation	0210	
	Unrecognized operation	0211	
	Mistyped argument	0212	
	Resource limitation	0213	
-	Other status codes	anything else	

A.7.3.2.7 Query/Retrieve Service

A.7.3.2.7.1 SCU of the Query/Retrieve FIND SOP Classes - C-FIND

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-48~~Table A.7-48~~ lists the Status Codes that the SCU of any of the Query/Retrieve FIND SOP Class supports for the C-FIND message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-48: Status Codes C-FIND for Query/Retrieve FIND SOP Classes - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Error: Unable to process	C000-CFFF	
	SOP Class Not Supported	0122	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	
-	Other status codes	anything else	

A.7.3.2.7.2 SCU of the Query/Retrieve MOVE SOP Classes - C-MOVE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-49~~Table A.7-49~~ lists the Status Codes that the SCU of any of the Query/Retrieve MOVE SOP Class supports for the C-MOVE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-49: Status Codes C-MOVE for Query/Retrieve MOVE SOP Classes - SCU

Service Status	Further Meaning	Status Codes	Related Fields	Behavior
Success	Sub-operations Complete - No Failures	0000	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	
Warning	Sub-operations Complete - One or more Failures	B000	(0000,1020) (0000,1022) (0000,1023)	
Failed	Out of Resources - Unable to calculate number of matches	A701	(0000,0902)	
	Out of Resources - Unable to perform sub-operations	A702	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	
	Move Destination unknown	A801	(0000,0902)	
	Identifier does not match SOP Class	A900	(0000,0901) (0000,0902)	
	Unable to process	Cxxx	(0000,0901) (0000,0902)	
Cancel	Sub-operations terminated due to Cancel Indication	FE00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	
Pending	Sub-operations are continuing	FF00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	

Service Status	Further Meaning	Status Codes	Related Fields	Behavior
-	Other status codes	anything else	-	

A.7.3.2.7.3 SCP of the Query/Retrieve FIND SOP Classes - C-FIND

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-50~~Table A.7-50~~ lists the Status Codes that the SCP of any of the Query/Retrieve FIND SOP Classes supports for the C-FIND message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-50: Status Codes C-FIND for Query/Retrieve FIND SOP Classes - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Matching is complete - No final identifier is supplied	0000	
Failure	Refused: Out of Resources	A700	
	Error: Identifier does not match SOP Class	A900	
	Error: Unable to process	C000	
	SOP Class Not Supported	0122	
Cancel	Matching terminated due to cancel	FE00	
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier	FF01	

A.7.3.2.7.4 SCP of the Query/Retrieve MOVE SOP Classes - C-MOVE

Table A.7-51~~Table A.7-51~~ lists the Status Codes that the SCP of any of the Query/Retrieve MOVE SOP Classes supports for the C-MOVE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

[Describe the action on the storage sub operation e due to above mentioned conditions. – Mention what happens to the store sub-operation when the specific condition occurs.]

Table A.7-51: Status Codes C-MOVE for Query/Retrieve MOVE SOP Classes - SCP

Service Status	Further Meaning	Status Codes	Related Fields sent in the response	Condition	Action on the Store due the condition.
Success	Sub-operations Complete - No Failures	0000	(0000,1020) (0000,1021) (0000,1022) (0000,1023)		
Warning	Sub-operations Complete - One or more Failures	B000	(0000,1020) (0000,1022) (0000,1023)		
Failed	Out of Resources - Unable to calculate number of matches	A701	(0000,0902)		
	Out of Resources - Unable to perform sub-operations	A702	(0000,1020) (0000,1021) (0000,1022) (0000,1023)		
	Move Destination unknown	A801	(0000,0902)		
	Identifier does not match SOP Class	A900	(0000,0901) (0000,0902)		
	Unable to process	Cxxx	(0000,0901) (0000,0902)		
Cancel	Sub-operations terminated due to Cancel Indication	FE00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)		
Pending	Sub-operations are continuing	FF00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)		

A.7.3.2.8 Print Management Service

A.7.3.2.8.1 SCU of the Basic Film Session SOP Class

SCU of the Basic Film Session SOP Class - N-CREATE

Table A.7-52~~Table A.7-52~~ lists the Status Codes that the SCU of the Basic Film Session SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-52: Status Codes for N-CREATE of the Basic Film Session SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Memory allocation not supported	B600	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Film Session SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-53~~Table A.7-53~~ lists the Status Codes that the SCU of the Basic Film Session SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-53: Status Codes for N-SET of the Basic Film Session SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior

Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Memory allocation not supported	B600	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	No such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Film Session SOP Class - N-DELETE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-54~~Table A.7-54~~ lists the Status Codes that the SCU of the Basic Film Session SOP Class supports for the N-DELETE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-54: Status Codes for N-DELETE of the Basic Film Session SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Film Session SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-55~~Table A.7-55~~ lists the Status Codes that the SCU of the Basic Film Session SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-55: Status Codes for N-Action of the Basic Film Session SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Film belonging to the film session are accepted for printing; if supported, the Print Job SOP Instance is created	0000	
Warning	Film session printing (collation) is not supported	B601	
	Film Session SOP Instance hierarchy does not contain Image Box SOP Instances (empty page)	B602	

Service Status	Further Meaning	Status Code	Behavior
	Image size is larger than image box size, the image has been demagnified.	B604	
	Image size is larger than the Image Box size. The Image has been cropped to fit.	B609	
	Image size or Combined Print Image size is larger than the Image Box size. Image or Combined Print Image has been decimated to fit.	B60A	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No Such Argument	0114	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	No Such Action	0123	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Failed: Film Session SOP Instance hierarchy does not contain Film Box SOP Instances	C600	
	Failed: Unable to create Print Job SOP Instance; print queue is full	C601	
	Failed: Image size is larger than image box size	C603	
	Failed: Combined Print Image size is larger than the Image Box size	C613	
-	Other status codes	anything else	

A.7.3.2.8.2 SCU of the Basic Box Session SOP Class

Format the following line as a heading level 7

SCU of the Basic Box Session SOP Class - N-CREATE

Table A.7-52~~Table A.7-52~~ lists the Status Codes that the SCU of the Basic Film Box SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-56: Status Codes for N-CREATE of the Basic Film Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	There is an existing Film Box that has not been printed and N-ACTION at the Film Session level is not supported. A new Film Box will not be created when a previous Film Box has not been printed	C616	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Box Session SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-57~~Table A.7-57~~ lists the Status Codes that the SCU of the Basic Film Box SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

Formatte

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-57: Status Codes for N-SET of the Basic Film Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	There is an existing Film Box that has not been printed and N-ACTION at the Film Session level is not supported. A new Film Box will not be created when a previous Film Box has not been printed	C616	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Box Session SOP Class - N-DELETE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-58~~Table A.7-58~~ lists the Status Codes that the SCU of the Basic Film Box SOP Class supports for the N-DELETE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-58: Status Codes for N-DELETE of the Basic Film Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Basic Box Session SOP Class - N-ACTION

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-59~~Table A.7-59~~ lists the Status Codes that the SCU of the Basic Film Box SOP Class supports for the N-ACTION message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-59: Status Codes for N-ACTION of the Basic Film Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Film Box SOP Instance hierarchy does not contain Image Box SOP Instances (empty page)	B603	
	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No Such Argument	0114	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	No Such Action	0123	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Unable to create Print Job SOP Instance; print queue is full.	C602	
	Image size is larger than Image Box size.	C603	
	Combined Print Image Size is larger than Image Box size.	C613	
-	Other status codes	anything else	

A.7.3.2.8.3 SCU of the Basic Grayscale Image Box SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-60~~Table A.7-60~~ lists the Status Codes that the SCU of the Basic Grayscale Image Box SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

Formatte

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-60: Status Codes for N-SET of the Grayscale Image Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Requested Min Density or Max Density outside of printer's operating range.	B605	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Image size is larger than Image Box size.	C603	
	Insufficient memory in printer to store the image.	C605	
	Combined Print Image Size is larger than Image Box size.	C613	
-	Other status codes	anything else	

A.7.3.2.8.4 SCU of the Basic Color Image Box SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-61~~Table A.7-61~~ lists the Status Codes that the SCU of the Basic Color Image Box SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-61: Status Codes for N-SET of the Color Image Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Image size is larger than Image Box size.	C603	
	Insufficient memory in printer to store the image.	C605	

Service Status	Further Meaning	Status Code	Behavior
	Combined Print Image Size is larger than Image Box size.	C613	
-	Other status codes	anything else	

A.7.3.2.8.5 SCU of the Printer SOP Class

Format the following line as a heading level 7

SCU of the Printer SOP Class - N-EVENT-REPORT

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-62~~Table A.7-62~~ lists the Status Codes that the SCU of Printer SOP Class supports for the N-EVENT-REPORT message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-62: Status Codes for N-EVENT-REPORT of the Printer SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	No Such Event Type	0113	
	No Such Argument	0114	
	Invalid Argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Printer SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-63~~Table A.7-63~~ lists the Status Codes that the SCU of the Printer SOP Class supports for the N-GET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-63: Status Codes for N-GET of the Printer SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.8.6 SCU of the Basic Annotation Box SOP Class - N-SET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-64~~Table A.7-64~~ lists the Status Codes that the SCU of the Basic Annotation Box SOP Class supports for the N-SET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-64: Status Codes for N-SET of the Basic Annotation Box SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.8.7 SCU of the Print Job SOP Class

Format the following line as a heading level 7

SCU of the Print Job SOP Class - N-EVENT-REPORT

Table A.7-65~~Table A.7-65~~ lists the Status Codes that the SCU of the Print Job SOP Class supports for the N-EVENT-REPORT message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. If any other status code is supported add it to the table.] In the "other status codes" row document the behavior of the application in case it encounters and unknown status code.]

Table A.7-65: Status Codes N-EVENT-REPORT of the Print Job SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	

Service Status	Further Meaning	Status Code	Behavior
	No Such Event Type	0113	
	No Such Argument	0114	
	Invalid Argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Print Job SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-66~~Table A.7-66~~ lists the Status Codes that the SCU of Print Job SOP Class supports for the N-GET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-66: Status Codes for N-GET of the Print Job SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	

Service Status	Further Meaning	Status Code	Behavior
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.8.8 SCU of the Presentation LUT SOP Class

Format the following line as a heading level 7

SCU of the Presentation LUT SOP Class - N-CREATE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-67~~Table A.7-67~~ lists the Status Codes that the SCU of the Presentation LUT SOP Class supports for the N-CREATE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-67: Status Codes N-CREATE of the Presentation LUTSOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	

Service Status	Further Meaning	Status Code	Behavior
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

Format the following line as a heading level 7

SCU of the Presentation LUT SOP Class - N-DELETE

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-68~~Table A.7-68~~ lists the Status Codes that the SCU of the Presentation LUT SOP Class supports for the N-DELETE message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-68: Status Codes for N-DELETE of the Presentation LUT SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.8.9 SCU of the Printer Configuration Retrieval SOP Class - N-GET

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-69~~Table A.7-69~~ lists the Status Codes that the SCU of the Printer Configuration SOP Class supports for the N-GET message and defines the application behavior when encountering the listed Status Codes.

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-69: Status Codes N-GET of the Printer Configuration Retrieval SOP Class - SCU

Service Status	Further Meaning	Status Code	Behavior
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
-	Other status codes	anything else	

A.7.3.2.8.10 SCP of the Basic Film Session SOP Class

Format the following line as a heading level 7

SCP of the Basic Film Session SOP Class - N-CREATE

Table A.7-70~~Table A.7-70~~ lists the Status Codes that the SCP of the Basic Film Session SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-70: Status Codes for N-CREATE of the Basic Film Session SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Memory allocation not supported	B600	
	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Basic Film Session SOP Class - N-SET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-71~~Table A.7-71~~ lists the Status Codes that the SCP of the Basic Film Session SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-71: Status Codes for N-SET of the Basic Film Session SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute Value Out of Range	0116	
	Attribute List Error	0107	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	

	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Basic Film Session SOP Class - N-DELETE

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-72~~Table A.7-72~~ lists the Status Codes that the SCP of the Basic Film Session SOP Class supports for the N-DELETE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-72: Status Codes for N-DELETE of the Basic Film Session SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Basic Film Session SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-73~~Table A.7-73~~ lists the Status Codes that the SCP of the Basic Film Session SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-73: Status Codes for N-ACTION of the Basic Film Session SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Film belonging to the film session are accepted for printing; if supported, the Print Job SOP Instance is created	0000	
Warning	Film session printing (collation) is not supported	B601	
	Film Session SOP Instance hierarchy does not contain Image Box SOP Instances (empty page)	B602	
	Image size is larger than image box size, the image has been demagnified.	B604	
	Image size is larger than the Image Box size. The Image has been cropped to fit.	B609	
	Image size or Combined Print Image size is larger than the Image Box size. Image or Combined Print Image has been decimated to fit.	B60A	
Failure	Failed: Film Session SOP Instance hierarchy does not contain Film Box SOP Instances	C600	
	Failed: Unable to create Print Job SOP Instance; print queue is full	C601	
	Failed: Image size is larger than image box size	C603	
	Failed: Combined Print Image size is larger than the Image Box size	C613	

A.7.3.2.8.11 SCP of the Basic Film Box SOP Class

Format the following line as a heading level 7

SCP of the Basic Film Box SOP Class - N-CREATE

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-74~~Table A.7-74~~ lists the Status Codes that the SCP of the Basic Film Box SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-74: Status Codes for N-CREATE of the Basic Film Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition

Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	There is an existing Film Box that has not been printed and N-ACTION at the Film Session level is not supported. A new Film Box will not be created when a previous Film Box has not been printed	C616	

Format the following line as a heading level 7

SCP of the Basic Film Box SOP Class - N-SET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-75~~Table A.7-75~~ lists the Status Codes that the SCP of the Basic Film Box SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-75: Status Codes for N-SET of the Basic Film Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	

Service Status	Further Meaning	Status Code	Condition
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	There is an existing Film Box that has not been printed and N-ACTION at the Film Session level is not supported. A new Film Box will not be created when a previous Film Box has not been printed	C616	

Format the following line as a heading level 7

SCP of the Basic Film Box SOP Class - N-DELETE

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-76~~Table A.7-76~~ lists the Status Codes that the SCP of the Basic Film Box SOP Class supports for the N-DELETE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-76: Status Codes for N-DELETE of the Basic Film Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	

	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Basic Film Box SOP Class - N-ACTION

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-77~~Table A.7-77~~ lists the Status Codes that the SCP of the Basic Film Box SOP Class supports for the N-ACTION message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-77: Status Codes for N-ACTION of the Basic Film Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Film Box SOP Instance hierarchy does not contain Image Box SOP Instances (empty page)	B603	
	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	Processing failure	0110	
	No such SOP Instance	0112	
	No Such Argument	0114	
	Invalid argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	No Such Action	0123	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	

Service Status	Further Meaning	Status Code	Condition
	Resource Limitation	0213	
	Unable to create Print Job SOP Instance; print queue is full.	C602	
	Image size is larger than Image Box size.	C603	
	Combined Print Image Size is larger than Image Box size.	C613	

A.7.3.2.8.12 SCP of the Basic Grayscale Image Box SOP Class - N-SET

Table A.7-78~~Table A.7-78~~ lists the Status Codes that the SCP of the Basic Grayscale Image Box SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-78: Status Codes for N-SET of the Basic Grayscale Image Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Requested Min Density or Max Density outside of printer's operating range.	B605	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Image size is larger than Image Box size.	C603	

Service Status	Further Meaning	Status Code	Condition
	Insufficient memory in printer to store the image.	C605	
	Combined Print Image Size is larger than Image Box size.	C613	

A.7.3.2.8.13 SCP of the Basic Color Image Box SOP Class - N-SET

Table A.7-79~~Table A.7-79~~ lists the Status Codes that the SCP of the Basic Color Image Box SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-79: Status Codes for N-SET of the Basic Color Image Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Image size is larger than Image Box size. The image has been demagnified.	B604	
	Requested Min Density or Max Density outside of printer's operating range.	B605	
	Image size is larger than Image Box size. The image has been cropped to fit.	B609	
	Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit.	B60A	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	
	Image size is larger than Image Box size.	C603	
	Insufficient memory in printer to store the image.	C605	

Service Status	Further Meaning	Status Code	Condition
	Combined Print Image Size is larger than Image Box size.	C613	

A.7.3.2.8.14 SCP of the Printer SOP Class

Format the following line as a heading level 7

SCP of the Printer SOP Class - N-EVENT-REPORT

Table A.7-80~~Table A.7-80~~ lists the Status Codes that the SCP of the Printer SOP Class supports for the N-EVENT-REPORT message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-80: Status Codes for N-EVENT-REPORT of the Printer SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	No Such Event Type	0113	
	No Such Argument	0114	
	Invalid Argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Printer SOP Class - N-GET

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-81~~Table A.7-81~~ lists the Status Codes that the SCP of the Printer SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-81: Status Codes for N-GET of the Printer SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure *	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.2.8.15 SCP the Basic Annotation Box SOP Class - N-SET

Table A.7-82~~Table A.7-82~~ lists the Status Codes that the SCP of the Basic Annotation Box SOP Class supports for the N-SET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-82: Status Codes for N-SET of the Basic Annotation Box SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.2.8.16 SCP of the Print Job SOP Class

Format the following line as a heading level 7

SCP of the Print Job SOP Class - N-EVENT-REPORT

Table A.7-83~~Table A.7-83~~ lists the Status Codes that the SCP of the Print Job SOP Class supports for the N-EVENT-REPORT message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-83: Status Codes for N-EVENT-REPORT of the Print Job SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	No Such Event Type	0113	
	No Such Argument	0114	
	Invalid Argument Value	0115	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Print Job SOP Class - N-GET

Table A.7-84~~Table A.7-84~~ lists the Status Codes that the SCP of the Print Job SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-84: Status Codes for N-GET of the Print Job SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	

Service Status	Further Meaning	Status Code	Condition
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.2.8.17 SCP of the Presentation LUT SOP Class

Format the following line as a heading level 7

SCP of the Presentation LUT SOP Class - N-CREATE

Table A.7-85~~Table A.7-85~~ lists the Status Codes that the SCP of the Presentation LUT SOP Class supports for the N-CREATE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-85: Status Codes for N-CREATE of the Presentation LUT SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute List Error	0107	
	Attribute Value Out of Range	0116	
	Requested Min Density or Max Density outside of printer's operating range	B605	
Failure	No Such Attribute	0105	
	Invalid Attribute Value	0106	
	Processing Failure	0110	
	Duplicate SOP Instance	0111	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Missing Attribute	0120	
	Missing Attribute Value	0121	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

Format the following line as a heading level 7

SCP of the Presentation LUT SOP Class - N-DELETE

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-86~~Table A.7-86~~ lists the Status Codes that the SCP of the Presentation LUT SOP Class supports for the N-DELETE message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-86: Status Codes for N-DELETE of the Presentation LUT SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Failure	Processing Failure	0110	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.2.8.18SCP of the Printer Configuration Retrieval SOP Class - N-GET

Error! Reference source not found.~~Table A.7-87~~ lists the Status Codes that the SCP of the Printer Configuration SOP Class supports for the N-GET message and defines conditions in which the listed Status Codes are sent.

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-87: Status Codes for N-GET of the Printer Configuration Retrieval SOP Class - SCP

Service Status	Further Meaning	Status Code	Condition
Success	Success	0000	
Warning	Attribute List Error	0107	
Failure	Processing Failure	0110	
	No Such SOP Instance	0112	
	Invalid Object Instance	0117	
	No Such SOP Class	0118	
	Class-Instance Conflict	0119	
	Refused: Not Authorized	0124	
	Duplicate Invocation	0210	

Service Status	Further Meaning	Status Code	Condition
	Unrecognized Operation	0211	
	Mistyped Argument	0212	
	Resource Limitation	0213	

A.7.3.3 DÍCOM Web Services

A.7.3.3.1General Status Codes

This section describes the common Status Code behavior and handling all the supported transaction.

A.7.3.3.1.1 Common Transaction as Origin Server

Table A.7-88~~Table A.7-88~~ lists the Status Codes that an origin server supports for all transactions and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-88: Status Codes of Origin Server for all Transactions

Status	Code	Condition
Success	200 (Success)	
	201 (Created)	
	202 (Accepted)	
	203 (Non-Authoritative Information)	
	204 (No-Content)	
	205 (Reset Content)	
	206 (Partial Content)	
Redirection	301 (Moved Permanently)	
	303 (See Other)	
	304 (Not Modified)	
Client Error	400 (Bad Request)	
	401 (Unauthorized)	
	403 (Forbidden)	
	404 (Not Found)	
	405 (Method Not Allowed)	
	406 (Not Acceptable)	
	409 (Conflict)	
	410 (Gone)	
	411 (Length Required)	
	413 (Payload Too Large)	
	414 (URI Too Long)	

Status	Code	Condition
	415 (Unsupported Media Type)	
Server Error	500 (Internal Server Error)	
	501 (Not Implemented)	
	503 (Service Unavailable)	
	505 (HTTP Version Not Supported)	

A.7.3.3.1.2 Common Transaction as User Agent

Table A.7-89~~Table A.7-89~~ lists the Status Codes that a user agent supports for all transactions and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-89: Status Codes of User Agent for all Transactions

Status	Code	Behavior
Success	200 (Success)	
	201 (Created)	
	202 (Accepted)	
	203 (Non-Authoritative Information)	
	204 (No-Content)	
	205 (Reset Content)	
	206 (Partial Content)	
Redirection	301 (Moved Permanently)	
	303 (See Other)	
	304 (Not Modified)	
Client Error	400 (Bad Request)	
	401 (Unauthorized)	
	403 (Forbidden)	
	404 (Not Found)	
	405 (Method Not Allowed)	
	406 (Not Acceptable)	
	409 (Conflict)	
	410 (Gone)	
	411 (Length Required)	
	413 (Payload Too Large)	

Status	Code	Behavior
	414 (URI Too Long)	
	415 (Unsupported Media Type)	
Server Error	500 (Internal Server Error)	
	501(Not Implemented)	
	503 (Service Unavailable)	
	505 (HTTP Version Not Supported)	
-	Other status codes	

A.7.3.3.2 URI Web Service

A.7.3.3.2.1 URI Web Service as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-90~~Table A.7-90~~ lists the Status Codes that an origin server supports for the URI Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-90: Status Codes of Origin Server for URI Service

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad)	
	404 (Not Found)	
	410 (Gone)	

A.7.3.3.2.2 URI Web Service as User Agent

TableA.7-91~~Table A.7-91~~ lists the Status Codes that a user agent supports for the URI Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

TableA.7-91: Status Codes of User Agent for URI Service

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad)	

Status	Code	Behavior
	404 (Not Found)	
	410 (Gone)	
-	Other status codes	

A.7.3.3.3 Studies Web Service

A.7.3.3.3.1 Retrieve Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-92~~Table A.7-92~~ lists the Status Codes that an origin server supports for the Retrieve Transaction of the Studies Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-92: Status Codes of Origin Server for Retrieve Transaction

Status	Code	Condition
Success	200 (OK)	
	206 (Partial Content)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	406 (Not Acceptable)	
	410 (Gone)	
	413 (Payload Too Large)	

A.7.3.3.3.2 Retrieve Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-93~~Table A.7-93~~ lists the Status Codes that a user agent supports for the Retrieve Transaction of the Studies Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-93: Status Codes of User Agent for Retrieve Transaction

Status	Code	Behavior
Success	200 (OK)	
	206 (Partial Content)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	406 (Not Acceptable)	
	410 (Gone)	
	413 (Payload Too Large)	
-	Other status codes	

A.7.3.3.3.3 Store Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-94~~Table A.7-94~~ lists the Status Codes that an origin server supports for the Store Transaction of the Studies Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-94: Status Codes of Origin Server for Store Transaction

Status	Code	Condition
Success	200 (OK)	
	202 (Accepted)	
Failure	400 (Bad Request)	
	409 (Conflict)	
	415 (Unsupported Media Type)	

A.7.3.3.3.4 Store Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-95~~Table A.7-95~~ lists the Status Codes that a user agent supports for the Store Transaction of the Studies Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-95: Status Codes of User Agent for Store Transaction

Status	Code	Behavior
Success	200 (OK)	
	202 (Accepted)	
Failure	400 (Bad Request)	
	409 (Conflict)	
	415 (Unsupported Media Type)	
-	Other status codes	

A.7.3.3.3.5 Search Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-96~~Table A.7-96~~ lists the Status Codes that an origin server supports for the Search Transaction of the Studies Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-96: Status Codes of Origin Server for Search Transaction

Status	Code	Condition
Success	200 (OK)	
	204 (No Content)	
Failure	400 (Bad Request)	
	413 (Payload Too Large)	

A.7.3.3.3.6 Search Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-97~~Table A.7-97~~ lists the Status Codes that a user agent supports for the Search Transaction of the Studies Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-97: Status Codes of User Agent for Search Transaction

Status	Code	Behavior
Success	200 (OK)	
	204 (No Content)	
Failure	400 (Bad Request)	
	413 (Payload Too Large)	
-	Other status codes	

A.7.3.3.4 Worklist Web Service

A.7.3.3.4.1 Create Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

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Table A.7-98~~Table A.7-98~~ lists the Status Codes that an origin server supports for the Create Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-98: Status Codes of Origin Server for Create Transaction

Status	Code	Condition
Success	201 (Created)	
Failure	400 (Bad Request)	
	409 (Conflict)	

A.7.3.3.4.2 Create Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-99~~Table A.7-99~~ lists the Status Codes that a user agent supports for the Create Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-99: Status Codes of User Agent for Create Transaction

Status	Code	Behavior
Success	201 (Created)	
Failure	400 (Bad Request)	

	409 (Conflict)	
-	Other status codes	

A.7.3.3.4.3 Retrieve Workitem Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-100~~Table A.7-100~~ lists the Status Codes that an origin server supports for the Retrieve Workitem Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-100: Status Codes of Origin Server for Retrieve Workitem Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	

A.7.3.3.4.4 Retrieve Workitem Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-101~~Table A.7-101~~ lists the Status Codes that a user agent supports for the Retrieve Workitem Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-101: Status Codes of User Agent for Retrieve Workitem Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	
-	Other status codes	

A.7.3.3.4.5 Update Workitem Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-102~~Table A.7-102~~ lists the Status Codes that an origin server supports for the Update Workitem Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-102: Status Codes of Origin Server for Update Workitem Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	

A.7.3.3.4.6 Update Workitem Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-103~~Table A.7-103~~ lists the Status Codes that a user agent supports for the Update Workitem Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-103: Status Codes of User Agent for Update Workitem Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	
-	Other status codes	

A.7.3.3.4.7 Change Workitem State Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-104~~Table A.7-104~~ lists the Status Codes that an origin server supports for the Change Workitem State Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-104: Status Codes of Origin Server for Change Workitem State Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	

A.7.3.3.4.8 Change Workitem State Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

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Table A.7-105~~Table A.7-105~~ lists the Status Codes that a user agent supports for the Change Workitem Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-105: Status Codes of User Agent for Change Workitem State Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	410 (Gone)	
-	Other status codes	

A.7.3.3.4.9 Request Cancellation Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-106~~Table A.7-106~~ lists the Status Codes that an origin server supports for the Request Cancellation of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-106: Status Codes of Origin Server for Request Cancellation Transaction

Status	Code	Condition
Success	202 (Accepted)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	

A.7.3.3.4.10 Request Cancellation Transaction as User Agent

Table A.7-107~~Table A.7-107~~ lists the Status Codes that a user agent supports for the Request Cancellation Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-107: Status Codes of User Agent for Request Cancellation Transaction

Status	Code	Behavior
Success	202 (Accepted)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
-	Other status codes	

A.7.3.3.4.11 Search Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-108~~Table A.7-108~~ lists the Status Codes that an origin server supports for the Search Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-108: Status Codes of Origin Server for Search Transaction

Status	Code	Condition
Success	200 (OK)	
	204 (No Content)	
	206 (Partial Content)	
Failure	400 (Bad Request)	
	413 (Payload Too Large)	

A.7.3.3.4.12Search Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-109~~Table A.7-109~~ lists the Status Codes that a user agent supports for the Search Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-109: Status Codes of User Agent for Search Transaction

Status	Code	Behavior
Success	200 (OK)	
	204 (No Content)	
	206 (Partial Content)	
Failure	400 (Bad Request)	
	413 (Payload Too Large)	
-	Other status codes	

A.7.3.3.4.13 Subscribe Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-110~~Table A.7-110~~ lists the Status Codes that an origin server supports for the Subscribe Transaction of the Worklist Web Service and the conditions in which the listed Status Codes is sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-110: Status Codes of Origin Server for Subscribe Transaction

Status	Code	Condition
Success	201 (Created)	

Failure	400 (Bad Request)	
	403 (Forbidden)	
	404 (Not Found)	

A.7.3.3.4.14 Subscribe Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Formatte

Table A.7-111~~Table A.7-111~~ lists the Status Codes that a user agent supports for the Subscribe Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-111: Status Codes of User Agent for Subscribe Transaction

Status	Code	Behavior
Success	201 (Created)	
Failure	400 (Bad Request)	
	403 (Forbidden)	
	404 (Not Found)	
-	Other status codes	

A.7.3.3.4.15 Unsubscribe Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-112~~Table A.7-112~~ lists the Status Codes that an origin server supports for the Unsubscribe Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-112: Status Codes of Origin Server for Unsubscribe Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	

A.7.3.3.4.16 Unsubscribe Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-113~~Table A.7-113~~ lists the Status Codes that a user agent supports for the Unsubscribe Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-113: Status Codes of User Agent for Unsubscribe Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
-	Other status codes	

A.7.3.3.4.17 Suspend Global Subscription Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-114~~Table A.7-114~~ lists the Status Codes that an origin server supports for the Suspend Global Subscription Transaction of the Worklist Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-114: Status Codes of Origin Server for Suspend Global Subscription Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	

A.7.3.3.4.18 Suspend Global Subscription Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-115~~Table A.7-115~~ lists the Status Codes that a user agent supports for the Suspend Global Subscription Transaction of the Worklist Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-115: Status Codes of User Agent for Suspend Global Subscription Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
-	Other status codes	

A.7.3.3.5 Non-Patient Instance Web Service

A.7.3.3.5.1 Retrieve Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-116~~Table A.7-116~~ lists the Status Codes that an origin server supports for the Retrieve Transaction of the Non-Patient Instance Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-116: Status Codes of Origin Server for Retrieve Transaction

Status	Code	Condition
Success	200 (OK)	
Failure Success	400 (Bad Request)	
	404 (Not Found)	
	406 (Unsupported Media Type)	

A.7.3.3.5.2 Retrieve Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-117~~Table A.7-117~~ lists the Status Codes that a user agent supports for the Retrieve Transaction of the Non-Patient Instance Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-117: Status Codes of User Agent for Retrieve Transaction

Status	Code	Behavior
Success	200 (OK)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	406 (Unsupported Media Type)	
-	Other status codes	

A.7.3.3.5.3 Store Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

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Table A.7-118~~Table A.7-118~~ lists the Status Codes that an origin server supports for the Store Transaction of the Non-Patient Instance Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-118: Status Codes of Origin Server for Search Transaction

Status	Code	Condition
Success	200 (OK)	
	202 (Accepted)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	415 (Unsupported Media Type)	

A.7.3.3.5.4 Store Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

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In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-119~~Table A.7-119~~ lists the Status Codes that a user agent supports for the Store Transaction of the Non-Patient Instance Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-119: Status Codes of User Agent for Store Transaction

Status	Code	Behavior
Success	200 (OK)	
	202 (Accepted)	
Failure	400 (Bad Request)	
	404 (Not Found)	
	409 (Conflict)	
	415 (Unsupported Media Type)	
-	Other status codes	

A.7.3.3.5.5 Search Transaction as Origin Server

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Formatte

Table A.7-120~~Table A.7-120~~ lists the Status Codes that an origin server supports for the Search Transaction of the Non-Patient Instance Web Service and the conditions in which the listed Status Codes are sent:

[Describe the condition which causes the application to send the specific Status Codes. For each other status code used add a row to the table.]

Table A.7-120: Status Codes of Origin Server for Search Transaction

Status	Code	Condition
Success	200 (OK)	
Failure	406 (Unsupported Media Type)	
	413 (Payload Too Large)	

A.7.3.3.5.6 Search Transaction as User Agent

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

Formatte

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

Table A.7-121~~Table A.7-121~~ lists the Status Codes that a user agent supports for the Search Transaction of the Non-Patient Instance Web Service and defines the application behavior when encountering the listed Status Codes:

[Describe the behavior of the application when it receives any of the Status Codes listed in the table below, e.g., displaying and logging the error code or retrying the request. For each additional status code supported add a row to the table.

In the "Other status codes" row document the behavior of the application in case it encounters an unknown status code.]

5380 **Table A.7-121: Status Codes of User Agent for Search Transaction**

Status	Code	Behavior
Success	200 (OK)	
Failure	406 (Unsupported Media Type)	
	413 (Payload Too Large)	
-	Other status codes	

A.8 Security

[This section contains several subsections that describe information that may already be present in other security documents (e.g., MDS2 statement). For each subsection, you can therefore either fill it in or remove it and reference a security document if all requested information is present in the referenced document.]

A.8.1 Introduction

The security section describes security features implemented by this product. It includes descriptions of non-DICOM network protocols, information to configure firewalls and application whitelists, lists of supported DICOM security profiles as well as Web Security features. Additionally, secured media storage, VPN, etc. are also specified in this security section.

A.8.2 External Network Requirements

Table A.8-1~~Table A.8-1~~ describes additional non-DICOM network protocols that are used by <Product>.

[From this table, delete any Profiles/Actors/Transactions that are not supported at all. If the Profile is supported using a secure mechanism use Y for yes in the "Security Support" column, otherwise use N for No.]

Table A.8-1: External Network Requirements

Profile	Actor	Transaction	Protocol Used	RFCs	Security Support	Reference
Basic Time Synchronization	NTP Server	Maintain Time	NTP	RFC5905; *<<RFC5906 RFC8633>>*		A.11.1.1
		Find NTP Servers	NTP	RFC5905; *<<RFC5906 RFC8633>>*		A.11.1.1
	NTP Client	Maintain Time	NTP	RFC5905; *<<RFC5906 RFC8633>>*		A.11.1.1
		Find NTP Servers	NTP	RFC5905; *<<RFC5906 RFC8633>>*		A.11.1.1
	SNTP Client	Maintain Time	SNTP	RFC2030		A.11.1.1
	DHCP Server	Find NTP Servers	DHCP	RFC2131; RFC2132; RFC2563		A.11.1.1
	DHCP Client	Find NTP Servers	DHCP	RFC2131; RFC2132; RFC2563		A.11.1.1
Basic Network Address Management	DHCP Server	Configure DHCP Server	-	-		A.11.1.2
		Find and Use DHCP Server	DHCP	RFC2131; RFC2132;		A.11.1.2

				RFC2563		
		Maintain Lease	DCP	RFC2131; RFC2132		A.11.1.2
		Resolve Hostname	DNS	RFC1035; RFC2181		A.11.1.2
		DDNS Coordination	DNS	RFC2136		A.11.1.2
	DHCP Client	Find and Use DHCP Server	DHCP	RFC2131; RFC2132; RFC2563		A.11.1.2
		Maintain Lease	DHCP	RFC2131; RFC2132		A.11.1.2
	DNS Server	DNS Coordination	DNS	RFC2136; *<<RFC4033 RFC4034 RFC4035>>*		A.11.1.2
		Resolve Hostname	DNS	RFC1035; RFC2181; *<<RFC4033 RFC4034 RFC4035>>*		A.11.1.2
	DNS Client	Resolve Hostname	DNS	RFC1035; RFC2181; *<<RFC4033 RFC4034 RFC4035>>*		A.11.1.2
Application Configuration Management	LDAP Server	Query LDAP Server	LDAP	RFC2251		A.11.1.3
		Update LDAP Server	LDAP	RFC2251		A.11.1.3
		Maintain LDAP Server	LDAP	RFC2849		A.11.1.3
	LDAP Client	Find LDAP Server	LDAP	RFC2181; RFC2219; RFC2782		A.11.1.3
		Query LDAP Server	LDAP	RFC2251		A.11.1.3
		Update LDAP Server	LDAP	RFC2251		A.11.1.3
	DNS Server	Find LDAP Server	LDAP	RFC2181; RFC2219;		A.11.1.3

				RFC2782		
DNS Service Discovery	DNS Server	Find DICOM Service	DNS	RFC2136; RFC2181; RFC2219; RFC2782; RFC6762; RFC6763; RFC8553; *<<RFC4033 RFC4034 RFC4035>>*		A.11.1.4
	DNS Client	Find DICOM Service	DNS	RFC2136; RFC2181; RFC2219; RFC2782; RFC6762; RFC6763; RFC8553; *<<RFC4033 RFC4034 RFC4035>>*		A.11.1.4
[Any additional profile]						

A.8.3 TCP Port Configuration

See Section A.6 Configuration for information on the usage of ports for DICOM and other protocols. This section contains helpful information for product administrators to configure firewalls, application whitelists, etc.

[It is advised to make sure enough information is provided to support security configuration. For example, for Firewall configuration, list all other non-DICOM ports and/or provide a reference to any other security document that may be useful for the reader.]

A.8.4 DICOM Security Profiles Support

A.8.4.1 Secure Use and User Identity Profiles

Table A.8-2~~Table A.8-2~~ lists the Secure Use and User Identity Profles:

[In Table A.8-2~~Table A.8-2~~ below, all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency reasons and mark them with "N".]

Table A.8-2: Secure Use and User Identity Profiles

Profile	Creator/Sender	Consumer/Receiver	Reference
Online Electronic Storage Secure Use			A.11.2.1
Audit Trail Message Format			A.11.2.2

Audit Trail Message Transmission Profile - SYSLOG-TLS			A.11.2.3
Audit Trail Message Transmission Profile - SYSLOG-UDP			A.11.2.4
Basic User Identity Association			A.8.5
User Identity Plus Passcode Association			A.8.5
Kerberos Identity Negotiation Association			A.8.5
Generic SAML Assertion Identity Negotiation Association			A.8.5
[Any additional profile]			

A.8.4.2 Secure Transport Connection Profiles

[In Table A.8-3~~Table A.8-3~~ below, all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency reasons and mark them with "N".

In the "Secured AE" column list the AEs that support the Profile (use ALL if all AEs support it, ALL EXCEPT to provide an exception list). In the "Sender" and "Receiver" columns, describe if the Profile is supported or not using Y or N.]

Table A.8-3~~Table A.8-3~~ describes the Secure Transport Connection Profiles supported by the product. Accepted cipher suites are described in the section listed in the "Reference" column.

Table A.8-3: Secure Transport Connection Profiles

Profile	Secured AE	Sender	Receiver	Reference
BCP195 TLS Secure Transport Connection				A.11.2.5
Non-Downgrading BCP195 TLS Secure Transport Connection				A.11.2.5
Extended BCP195 TLS Secure Transport Connection				A.11.2.5
[Any additional or retired TLS Profile]				

A.8.4.3 Media Storage Security Profiles

See Section A.1.4 Media Services for information on supported secured Application Profiles and secured media.

Table A.8-4~~Table A.8-4~~ details the encryption mechanisms that are supported with secure media.

[In Table A.8-4~~Table A.8-4~~, all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency reasons and mark them with "N".]

Table A.8-4: Content Encryption used for Secured Media

Encryption	File Set Creator/File Set Updater	File Set Reader
AES		
Triple-DES		
[Other encryption]		

[In Table A.8-5~~Table A.8-5~~, all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency reasons and mark them with "N".]

Table A.8-5: Content Types used for Secured Media

Content Types	File Set Creator/File Set Updater	File Set Reader
Signed-data		
Digested-data		
[Other content type]		

[In Table A.8-6~~Table A.8-6~~, all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency reasons and mark them with "N".]

Table A.8-6: Digest Algorithms used for Secured Media

Digest Algorithms	File Set Creator/File Set Updater	File Set Reader
SHA-1		
SHA256		
SHA384		
SHA512		
[Other digest algorithm]		

A.8.4.4 Attribute Confidentiality Profiles

Table A.8-7~~Table A.8-7~~ lists supported Attribute Confidentiality Profiles and options:

[In Table A.8-7~~Table A.8-7~~ all the Profiles not supported can be deleted. But it is also permitted to keep them for transparency Reasons and mark them with "N".

Add any private option and/or private profiles. For each option, indicate in the "AE" column the list of AEs that support the option (Use ALL if all AEs support it, ALL EXCEPT to provide an exception list). In remaining columns, indicate whether the option is supported as de-identifier, as re-identifier and if some configurability can be performed in the way anonymization can be applied.]

Table A.8-7: Attribute Confidentiality Profiles

Profile	Option	AE	De-identifier	Re-identifier	Configurable
Basic Application Level Confidentiality					
	Basic Profile				
	Clean Pixel Data				

	Clean Recognizable Visual Features				
	Clean Graphics				
	Clean Structured Content				
	Clean Descriptors				
	Retain Longitudinal Temporal Information with Full Dates				
	Retain Longitudinal Temporal Information with Modified Dates				
	Retain Patient Characteristics				
	Retain Device Identity				
	Retain Institution Identity				
	Retain UIDs				
	Retain Safe Private				
	[Additional option]				
[Any Additional confidentiality profiles]	*[Any option if applicable]*				

[Describe here the general strategy that applies to the product for new Attributes that could be defined later in the standard. Will they be kept, removed or can the behavior be configured?
If configurable, does the configuration apply to all new elements or will it be configurable on a data element per data element basis?]

See section A.11.2.6 for implementation details.

A.8.4.5 Digital Signature Profiles

[List here any Digital Signature Profile that your product may support. Also document the details of the supported profiles in Section A.11.2.7. Mark this section as N/A if your product does not support any Digital Signature profile.]

A.8.4.6 Additional DICOM Security Profiles

[List here any additional DICOM Security Profile that your product may support. Mark this section as N/A if your product does not support any additional profile.]

A.8.5 User Identity Negotiation Support

[If your product does not support any User Identity Negotiation, mark this section as N/A and delete subsections.]

A.8.5.1 Association Initiation

Table A.8-8~~Table A.8-8~~ lists User Identity Negotiation support as Association Initiator:

[In the following table, if your product supports User Identity Negociation as an Association Initiator, use Y for yes in the "Supported" column, otherwise use N for No. For each supported field, indicate the list of values that are supported in the "Requested Value" column.]

Table A.8-8: User Identity Negotiation as Association Initiator

User Identity Negotiation	Supported	Requested Value
User-Identity-Type		*<<1* *2* *3* *4* *5>>*
Positive-response-requested		*<<0* *1>>*

[If your product implements User Identity Negotiation without supporting a User Identity profile listed in SectionA.8.4.1, describe here additional encryption, MAC and signature algorithms that your product supports beyond the minimal requirements specified in RFC 7519 (e.g., for support of JSON Web Token (JWT) – User identity type=5).]

A.8.5.2 Association Acceptance

Table A.8-9~~Table A.8-9~~ lists User Identity Negotiation support as Association Acceptor:

[In the following table, if your product supports User Identity Negociation as an Association Acceptor, use Y for yes in the "Supported" column and indicate the list of values that are supported in the "Requested Value" column, otherwise use N for No.]

Table A.8-9: User Identity Negotiation as Association Acceptor

User Identity Negotiation	Supported	Supported Value
User-Identity-Type		*<<1* *2* *3* *4* *5>>*

[Describe here how your product supports User Identity negotiation to authenticate the user and rules applied to this authentication. If this information is provided in an external document, provide the reference to this document in this section instead.]

A.8.6 Web Services Security Features

[Describe in this section the security mechanisms utilized by the implementation. In particular (but not limited to), consider:

- *Audit control mechanism used*
- *Access authorizing policy*
- *Personal authentication mechanisms*
- *De-identification management*
- *Certification management tools and process*
- *Web server attack handling*

These descriptions may be just a reference to another section of the Conformance Statement if these mechanisms are common with DICOM networking services described before or may contain references to other relevant documentation.]

A.8.7 Other Security Features

[Describe in the following subsections any additional security features not covered in previous sections that your product may support.]

A.8.7.1 Media Storage Security

[Describe here any support of additional media storage security features such as encrypted media. Put "N/A" if none.]

A.8.7.2 Network Security

[Describe here any support additional network security features such as VPN, etc. Put "N/A" if none.]

A.8.7.3 Other Security Features

[Describe here any additional supported security features not described in previous sub-sections such as physical security features (access card, tokens, two factor authentications, OAuth, IHE IUA Profile etc.). If available, you can also provide a link to MDS2 statements applicable to the various AEs of this product here. Put "N/A" if none.]

The following Annexes should be numbered A.A to A.D as indicated in the header text (rather than A.9 to A.12) to indicate that these will be Annexes in Conformance Statement.

Annexes

[In an actual DICOM Conformance Statement the Sections 7.8A.9~~A.9~~ to 7.8A.12~~A.12~~ should be numbered A to D.

A.9 A.A Information Object Definitions (IODs)

[Note that the Annexes defined in the following subsections are a mandatory part of the DICOM Conformance Statement and must be filled for any product that creates DICOM objects.]

[For all SOP Instances of supported Storage SOP Classes (including Real Time Video objects) that can be created by the system (see Overview Section 7.8A.1.1~~A.1.1~~) provide an Annex A.x.]

[Throughout all the tables in this Annex, the Tag order is as it appears in the DICOM Standard to ease comparison and validation. It is recommended that products do the same in their Conformance Statements.]

This section describes all the SOP Instances natively created by <*Product*>, e.g. images created by an acquisition modality or evidence documents created on a review workstation (i.e., all SOP Classes that are marked in the "Created" column in Table A.1-1~~Table A.1-1~~). Details on Attribute coercion are defined in Section 7.8A.5.2.5.2~~A.5.2.5.2~~.

In the "Source" column, the following Values can be used:

- FIXED: The Value is pre-defined and cannot be modified.
- GENERATED: The Value is generated by the system.
- CONFIGURATION: The Value is copied from the system configuration.
- MWL: The Value is copied from a Modality Worklist entry.
- QUERY: The Value is determined by performing a query of any of the supported Query/Retrieve Services.
- USER: The Value is entered by the user.
- SCANNED: The Value is read from a barcode scanner or similar device.
- EMPTY: The Attribute is sent with a zero-length Value.
- SRC_INSTANCE: The Value is copied from previously created/received SOP Instances.

The "Presence" columns reflect the usage of the Module, Functional Group Macro, Attributes, or Value in the <*product*> Implementation and is not necessarily the same as defined in the DICOM Standard. For the "Presence" column the following Values can be used:

- ALWAYS: the module, functional group macro, Attributes or Value is always present.
- CONDITIONAL: the presence of the module, functional group macro, Attributes or Value is dependent on a condition. The condition must be listed in the "Conditions" column.
- SRC_COPY: The presence of the Attributes and Values depends on the availability of these in the source instances, which are used for copying this information.
- EMPTY: The Attribute is present but without a Value (zero length).

A.9.1 A.A.1 Information shared across multiple IODs

A.9.1.1 A.A.1.1 Common Modules

All SOP Instances generated by the system use the common modules listed in Table A.9-1~~Table A.9-1~~ to Table A.9-12~~Table A.9-12~~ or a subset of them, as defined in the IOD specific subsections below.

[The tables list the most common Modules; tables for additional Modules can be appended at the end. It is up to the editor of the DICOM Conformance Statement to move some of the tables to the IOD specific sections, if the information differs between the documented IODs.]

[Complete the following tables and provide information on all Attributes that are populated in your IOD, add additional Attributes, remove Attributes not used and provide a description how the Attributes are populated.]

[For the "Source" column use one of the pre-defined terms above, also note that multiple Values are allowed, however an explanation of the conditions under which one or the other Value is used, must be provided.]

[If in the "Value" column different Values are supported, they can be defined in the Shared Values and Code Set subsection and a reference to the respective table can be entered in the "Value" column. Furthermore, for Coded Terms it is possible to provide a reference to a CID defined in PS3.16.]

[For the "Presence" columns the Values defined above can be used. Also note that multiple Values are allowed, however an explanation of the conditions under which one or the other Value is used, must be provided.

[If the modules use Attributes that can support different Value Types (See DICOM PS3.15), add the Value Type supported in the "Comments" column.]

Table A.9-1: Patient Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Patient's Name	(0010,0010)	*MWL; USER*	*ALWAYS*	*CONDITIONAL*		*Value empty if unidentified Patient*	*See Annex A.12*
…							

Table A.9-2: General Study Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Study Instance UID	(0018,000D)	*MWL; GENERATED*	*ALWAYS*	*ALWAYS*			
Study Date	(0008,0020)	*GENERATED*	*ALWAYS*	*ALWAYS*	*Current Date*		
Accession Number	(0008,0050)	*MWL; EMPTY*	*ALWAYS*				*See Annex A.12*
…							
Requesting Service Code Sequence	*(0032,1034)*	*MWL; CONFIGURATION*	*ALWAYS*	*ALWAYS*	*See Section A.9.1.4*	*Copied from MWL or read from Configuration File*	
…							

Table A.9-3: General Series Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Modality	(0008,0060)	*FIXED*	*ALWAYS*	*ALWAYS*	*CT*		

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Series Instance UID	(0020,000E)	*GENERATED*	*ALWAYS*	*ALWAYS*			
…							

Table A.9-4: Frame of Reference Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
…							

Table A.9-5: General Equipment Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
…							

Table A.9-6: Enhanced General Equipment Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments

Table A.9-7: General Image Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
…							

Table A.9-8: Image Pixel Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Photometric Interpretation	(0028,0004)	*GENERATED*	*ALWAYS*		*See Section A.9.1.4*		
…							

Table A.9-9: Multi-Frame Functional Groups Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Shared Functional Groups Sequence	(5200,9229)						

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
> [*Include one or more Functional Group Macros documented in Section A.1.2 or in IOD specific subsections]*							
Per-frame Functional Groups Sequence	(5200,9230)						
> *[Include one or more Functional Group Macros documented in Section A.1.2 or in IOD specific subsections]*							
…							

5575 **Table A.9-10: Multi-Frame Dimension Module**

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
…							

Table A.9-11: Acquisition Context Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
…							

Table A.9-12: SOP Common Module

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
SOP Class UID	(008,0016)	*GENERATED*	*ALWAYS*	*ALWAYS*			*Value matches SOP Class of generated object*
SOP Instance UID	(0008,0018)	*GENERATED*	*ALWAYS*	*ALWAYS*			

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Specific Character Set	(0008,0005)	*CONFIGURATION*	*CONDITIONAL*	*ALWAYS*	*See Section A.5.7*	*Required if any Character Set other than ISO_IR 100 is used*	
…							
Private Data Element Characteristics Sequence	*(0008,0300)*	*GENERATED*	*CONDITIONAL*	*CONDITIONAL*	*Only present in IODs that use private data elements*	*Used if IOD contains private Attributes*	
>>…							

[If your product uses other Modules that are shared between multiple IODs created on your product, list them in tables following the structure of the above ones.]

A.9.1.2 A.A.1.2 Common Functional Group Macros

The tables below list the Common Functional Group Macros that can either be used as part of the Shared Functional Groups Sequence (5200,9229) or as part of the Per-frame Functional Groups Sequence (5200,9230) of enhanced image IODs.

[Modify/add/delete tables below to match your product implementation. For content of the columns, see the instructions in A.1.1 Common Modules:

- *Add Macros that are not listed, but used in IODs generated by your product*
- *Remove Macros that are not used by any of your IODs*
- *Modify/Add the Attributes as needed*

If you do not create any enhanced IODs mark this section as N/A, append "-N/A" to the Section Title and remove the tables below.]

Table A.9-13: Pixel Measures Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Pixel Measures Sequence	*(0028,9110)*						
>Pixel Spacing	*(0028,0030)*						
>Slice Thickness	*(0018,0050)*						
>Spacing Between Slices	*(0018,0088)*						

Table A.9-14: Frame Content Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Frame Content Sequence	*(0020,9111)*						

Table A.9-15: Plane Position (Patient) Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Plane Position Sequence	*(0020,9113)*						

Table A.9-16: Plane Orientation (Patient) Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Plane Orientation Sequence	*(0020,9116)*						

Table A.9-17: Referenced Image Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Referenced Image Sequence	*(0008,1140)*						

Table A.9-18: Frame Anatomy Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Frame Anatomy Sequence	*(0020,9071)*						

Table A.9-19: Irradiation Event Identification Functional Group Macro

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Irradiation Event Identification Sequence	*(0018,9477)*						

A.9.1.3 A.A.1.3 Common Private Modules

The tables below list private Attributes that are used in multiple IODs generated by the system. For documentation convenience and readability, they are organized in modules, although the concept of modules does not exist in the standard for private Attributes.

[For each Common Private Module create a table following the structure listed below and populate it with all private Attributes which are shared between different IODs. For each Attribute list name, Tag, Value Representation, Value Multiplicity, whether the Value contains Identifiable Information). In the "Identifiable Information" column the following Values can be used: SAFE, UNSAFE, MIXED. For details see the Private Data Element Characteristics Sequence (0008,0300) as defined in DICOM PS3.3.

For the other columns see the instructions above. It is highly recommended to populate the Private Data Element Characteristics Sequence (0008,0300) if Private Attributes are being used.]

[For a description of the purpose of the Private Attribute either use the "Comments" column or add a note below the table.]

Table A.9-20: Private Module 1

Attribute Name	Tag	VR	VM	Identifiable Information	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Private Creator	*(0009,00xx)*	*LO*	*1*				*ALWAYS*	*PRIVATEDATA1*		
Private Attribute 1	*(0009,xx01)*	*CS*	*1*				*ALWAYS*	*VALUE1*		
Private Attribute 2	*(0009,xx02)*	*IS*	*1-n*	*SAFE*			*CONDITIONAL*	*35\27\45*	*(0009,xx01) = VALUE1*	

Table A.9-21: Private Module 2

Attribute Name	Tag	VR	VM	Identifiable Information	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Private Creator	*(0029,00xx)*	*LO*	*1*					*PRIVATEDATA2*		
Private Attribute 3	*(0029,xx01)*	*DT*	*1*							
Private Attribute 4	*(0029,xx02)*	*TM*	*1*							

A.9.1.4 A.A.1.4 Coded Values

Table A.9-22~~Table A.9-22~~ lists Coded Values referenced from the "Value" column of the tables above.

[Document Coded Terms and Code String values in the following table. Coded Terms must be documented as (Code Value, Coding Scheme Designator, "Code Meaning".]

Table A.9-22: Values and Code Sets shared across IODs

Attribute Name	Tag	Value/Code	Condition	Comments
Requesting Service Code Sequence	*(0032,1034)*	*(309915006, SCT, "Cardiology")*		
		(309964003, SCT, "Radiology")		
Photometric Interpretation	*(0028,0004)*	*MONOCHROME1*	*Grayscale Images*	
		YBR_FULL_422	*JPEG compressed Images*	
		RGB	*Uncompressed color images*	

A.9.2 A.A.2 <*Image IOD 1 e.g. Computed Tomography Image IOD*>

Table A.9-23~~Table A.9-23~~ defines the structure of <*Image IOD 1*>.

[Provide a list of all Modules, their presence, conditions in which they will be present and a reference to a table with the detailed module description. Below is an example for a CT Image IOD.]

Table A.9-23: <*Image IOD 1*>

IE	Module Name	Presence (Module)	Condition	Reference
Patient	*Patient Module*	*ALWAYS*		*Table A.9-1~~Table A.9-1~~*
Study	*General Study Module*	*ALWAYS*		*Table A.9-2~~Table A.9-2~~*
Series	*General Series Module*	*ALWAYS*		*Table A.9-3~~Table A.9-3~~*
Frame Of Reference	*Frame of Reference*	*ALWAYS*		*Table A.9-4~~Table A.9-4~~*
Equipment	*General Equipment Module*	*ALWAYS*		*Table A.9-5~~Table A.9-5~~*
Image	*General Image Module*	*ALWAYS*		*Table A.9-7~~Table A.9-7~~*
	Image Plane Module	*ALWAYS*		*Table A.9-24~~Table A.9-24~~*
	CT Image	*ALWAYS*		*Table A.9-25~~Table A.9-25~~*
	Image Pixel Module	*ALWAYS*		*Table A.9-8~~Table A.9-8~~*
	SOP Common Module	*ALWAYS*		*Table A.9-12~~Table A.9-12~~*
	Private Module 1	*CONDITIONAL*	*Present for Acquisition Protocol XXX*	*Table A.9-20~~Table A.9-20~~*
	Private Module 2	*ALWAYS*		

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IE	Module Name	Presence (Module)	Condition	Reference
				Table A.9-21~~Table A.9-21~~
	Private Module 3	*ALWAYS*		*Table A.9-26~~Table A.9-26~~*

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A.9.2.1 A.A.2.1 <*Image IOD 1*> Specific Modules

The following tables list Modules and Attributes specific for <*Image IOD 1*>:

5655 *[List all IOD specific Modules in a separate table following the structure defined below, their Attributes, Values, usage, and conditions in the table below. For instructions on the content of the columns see instructions in Section A.A Information Object Definitions (IODs)~~A.A Information Object Definitions (IODs)~~.]*

Table A.9-24: Image Plane Module for <*Image IOD 1*>

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Pixel Spacing	*(0028,0030)*	*GENERATED*					
Image Orientation (Patient)	*(0020,0037)*	*GENERATED*					
Image Position (Patient)	*(0020,0032)*	*GENERATED*					
Slice Thickness	*(0018,0050)*	*GENERATED*					

Table A.9-25: CT Image Module for *<Image IOD 1>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Image Type	*(0008,0008)*	*GENERATED*			*See section A.2.4*		
Samples per Pixel	*(0028,0002)*	*GENERATED*			*1*		
Photometric Interpretation	*(0028,0004)*	*GENERATED*			*MONOCHROME2*		
Bits Allocated	*(0028,0100)*	*GENERATED*			*16*		
Bits Stored	*(0028,0101)*	*GENERATED*			*12*		
High Bit	*(0028,0102)*	*GENERATED*			*11*		
Rescale Intercept	*(0028,1052)*	*GENERATED*			*1024*		
Rescale Slope	*(0028,1053)*	*GENERATED*					
KVP	*(0018,0060)*	*GENERATED*					
Acquisition Number	*(0020,0012)*	*GENERATED*					
Exposure Time	*(0018,1150)*	*GENERATED*					
X-Ray Tube Current	*(0018,1151)*	*GENERATED*					
Exposure	*(0018,1152)*	*GENERATED*					
Anatomic Region Sequence	*(0008,2218)*	*GENERATED*			*See CID 4 "Anatomic Region"*		

A.9.2.2 A.A.2.2 *<Image IOD1>* Functional Group Macros - *NA*

N/A

A.9.2.3 A.A.2.3 *<Image IOD 1 >* Private Modules

Table A.9-26~~Table A.9-26~~ lists private Modules and Attributes for <*Image IOD 1*>:

[List all private Attributes added specifically for this IOD here. Mark this section as N/A if there are none. If the description gets too long, you can add footnotes under the table.]

Table A.9-26: Private Module3 for *<Image IOD 1>*

Attribute Name	Tag	VR	VM	Identifiable Information	Presence of Attribute	Presence of Value	Value	Conditions	Description
Private Creator	*(0039,00xx)*	*LO*	*1*			*ALWAYS*	*PRIVATEDATA3*		
Private Attribute 5	*(0039,xx01)*	*CS*	*1*	*SAFE*	*ALWAYS*	*ALWAYS*	*VALUE1*		
…									

A.9.2.4 A.A.2.4 *<Image IOD 1>* Coded Values

Table A.9-27~~Table A.9-27~~ lists Coded Values referenced from the "Value" column of the tables above for *<Image IOD 1>:*

[Document Coded Terms and Code String values in the following table. Coded Terms must be documented as (Code Value, Coding Scheme Designator, "Code Meaning".]

Table A.9-27: Values and Code Sets for *<Image IOD 1>*

Attribute Name	Tag	Value/Code	Condition	Comments
Image Type	*(0008,0008)*	*ORIGINAL* *DERIVED*	*Value for Value 1*	
		PRIMARY *SECONDARY*	*Value for Value 2*	
		AXIAL	*Value for Value 3*	
		VMI *ELECTRON_DENSITY*	*Value for Value 4*	
		…		

A.9.3 A.A.3 <Image IOD 2 e.g., Enhanced Computed Tomography Image IOD>

Table A.9-28~~Table A.9-28~~ defines the structure of *<Image IOD 2>*.

[Provide a list of all Modules, their presence, conditions in which they will be present and a reference to a table with the detailed module description. Below is an example for a Enhanced Computed Tomography Image IOD.]

Table A.9-28: *<Image IOD 2>*

IE	Module Name	Presence (Module)	Condition	Reference
Patient	*Patient Module*	*ALWAYS*		*Table A.9-1~~Table A.9-1~~* Formatte
Study	*General Study Module*	*ALWAYS*		*Table A.9-2~~Table A.9-2~~* Formatte

IE	Module Name	Presence (Module)	Condition	Reference
Series	*General Series Module*	*ALWAYS*		*Table A.9-3~~Table A.9-3~~*
	CT Series Module	*ALWAYS*		*Table A.9-30~~Table A.9-30~~*
Frame of Reference	*Frame of Reference*	*ALWAYS*		*Table A.9-4~~Table A.9-4~~*
Equipment	*General Equipment Module*	*ALWAYS*		*Table A.9-5~~Table A.9-5~~*
	Enhanced General Equipment	*ALWAYS*		*Table A.9-6~~Table A.9-6~~*
Image	*Image Pixel*	*ALWAYS*		*Table A.9-8~~Table A.9-8~~*
	Multi-Frame Functional Groups	*ALWAYS*		*Table A.9-9~~Table A.9-9~~*
	Multi-Frame Dimension	*ALWAYS*		*Table A.9-10~~Table A.9-10~~*
	Acquisition Context	*ALWAYS*		*Table A.9-11~~Table A.9-11~~*
	Enhanced CT Image	*ALWAYS*		*Table A.9-31~~Table A.9-31~~*
	SOP Common Module	*ALWAYS*		*Table A.9-12~~Table A.9-12~~*

Table A.9-29~~Table A.9-29~~ lists the Functional group macros used in <Image IOD2>. The “Usage” column defines whether a Macro is used as a shared Macro, on a per frame base or whether depending on the acquisition context can be used in both contexts. The following Values are supported:

- PER_FRAME: The macro is used on a per frame basis, the Attributes are included in the Per-frame Functional Groups Sequence (5200,9230)
- SHARED: The macro is shared across all frames; the Attributes are included in the Shared Functional Groups Sequence (5200,9229)
- CONTEXT_DEPENDENT: Depending on the acquisition context the macro can either be used on a per frame basis or be shared across all frames.

[Provide a list of all functional group macros, their presence, conditions in which they will be present and a reference to a table with the detailed macro description.]

Table A.9-29: Functional Group Macros used in *<Image IOD 2>*

Functional Group Macro	Presence	Condition	Usage	Reference
Pixel Measures	*ALWAYS*		*PER_FRAME*	*Table A.9-13~~Table A.9-13~~*
Frame Content	*ALWAYS*		*PER_FRAME*	*Table A.9-14~~Table A.9-14~~*

Functional Group Macro	Presence	Condition	Usage	Reference
Plane Position (Patient)	*ALWAYS*		*SHARED*	*Table A.9-15~~Table A.9-15~~* Formatte
Frame Anatomy	*ALWAYS*		*CONTEXT_DEPENDENT*	*Table A.9-18~~Table A.9-18~~* Formatte
Irradiation Event Identification	*ALWAYS*		*PER_FRAME*	*Table A.9-19~~Table A.9-19~~* Formatte
CT Image Frame Type	*ALWAYS*		*PER_FRAME*	*Table A.9-32~~Table A.9-32~~* Formatte
CT Acquisition Type	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-33~~Table A.9-33~~* Formatte
CT Acquisition Details	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-34~~Table A.9-34~~* Formatte
CT Table Dynamics	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-35~~Table A.9-35~~* Formatte
CT Position	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-36~~Table A.9-36~~* Formatte
CT Geometry	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-37~~Table A.9-37~~* Formatte
CT Reconstruction	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-38~~Table A.9-38~~.* Formatte
CT Exposure	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-39~~Table A.9-39~~* Formatte
CT X-Ray Details	*CONDITIONAL*	*For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED*	*SHARED*	*Table A.9-40~~Table A.9-40~~* Formatte
CT Pixel Value Transformation	*ALWAYS*		*SHARED*	*Table A.9-41~~Table A.9-41~~* Formatte
CT Additional X-Ray Source	*CONDITIONAL*	*For systems with multiple X-Ray sources*	*SHARED*	*Table A.9-42~~Table A.9-42~~* Formatte
Multi-energy CT Characteristics	*CONDITIONAL*	*For systems with multiple X-Ray sources*	*SHARED*	*Table A.9-43~~Table A.9-43~~* Formatte
..				

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A.9.3.1 A.A.3.1 <*Image IOD 2*> Specific Modules

The following tables list Modules and Attributes specific for <*Image IOD 2*>:

[List all IOD specific Modules in a separate table following the structure defined below, their Attributes, Values, usage, and conditions in the table below. For instructions on the content of the columns see instructions in Section A.A Information Object Definitions (IODs)~~A.A Information Object Definitions (IODs)~~.]

Table A.9-30: CT Series Module for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments

Table A.9-31: Enahnced CT Image Module for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments

A.9.3.2 A.A.3.2 *<Image IOD 2>* Functional Group Macros

The tables below list functional group macros and Attributes for *<Image IOD 2>:*

[For enhanced objects provide the list of IOD specific shared Functional Group Macros and per-frame Functional Group Macros. Create one table for each supported Functional Group Macro using the structure defined below.]

Table A.9-32: CT Frame Type Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Image Frame Type Sequence	*(0018,9329)*						
…							

Table A.9-33: CT Acquisition Type Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Acquisition Type Sequence	*(0018,9301)*						

Table A.9-34: CT Acquisition Details Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Acquisition Details Sequence	*(0018,9304)*						

Table A.9-35: CT Table Dynamics Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Table Dynamics Sequence	*(0018,9308)*						

Table A.9-36: CT Position Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Position Sequence	*(0018,9326)*						

Table A.9-37: CT Geometry Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Geometry Sequence	*(0018,9312)*						

Table A.9-38: CT Reconstruction Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Reconstruction Sequence	*(0018,9314)*						

Table A.9-39: CT Exposure Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Exposure Sequence	*(0018,9321)*						

Table A.9-40: CT X-Ray Details Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT X-Ray Details Sequence	*(0018,9325)*						

Table A.9-41: CT Pixel Value Transformation Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Pixel Value Transformation Sequence	*(0028,9145)*						

Table A.9-42: CT Additional X-Ray Source Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
CT Additional X-Ray Source Sequence	*(0018,9360)*						

Table A.9-43: CT Multi-energy CT Characteristics Functional Group Macro for *<Image IOD 2>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Multi-energy CT Processing Sequence	*(0018,9363)*						

A.9.3.3 A.A.3.3 *<Image IOD 2>* Private Modules

[List all private Attributes added specifically for this IOD here. Mark this section as N/A if there are none.]

A.9.3.4 A.A.3.4 *<Image IOD 2>* Coded Values

Table A.9-44~~Table A.9-44~~ lists Coded Values referenced from the "Value" column of the tables above for <*Image IOD 2*>:

[Document Coded Terms and Code String values in the following table. Coded Terms must be documented as (Code Value, Coding Scheme Designator, "Code Meaning".]

Table A.9-44: Values and Code Sets for *<Image IOD 2>*

Attribute Name	Tag	Value/Code	Condition	Comments

Attribute Name	Tag	Value/Code	Condition	Comments

A.9.4 A.A.4. *<SR IOD 1 e.g. Comprehensive SR IOD>*

Table A.9-45~~Table A.9-45~~ defines the structure of *<SR IOD 1>*.

[Provide a list of all Modules, their presence, conditions in which they will be present and a reference to a table with the detailed module description. Below is an example for anSR IOD.]

Table A.9-45: *<SR IOD 1>*

IE	Module Name	Presence (Module)	Condition	Reference
Patient	*Patient Module*	*ALWAYS*		*Table A.9-1~~Table A.9-1~~*
Study	*General Study Module*	*ALWAYS*		*Table A.9-2~~Table A.9-2~~*
Series	*SR Document Series Module*	*ALWAYS*		*Table A.9-47~~Table A.9-46~~*
Equipment	*General Equipment Module*	*ALWAYS*		*Table A.9-5~~Table A.9-5~~*
Document	*SR Document General Module*	*ALWAYS*		*Table A.9-47~~Table A.9-47~~*
	SR Document Content	*ALWAYS*		*Table A.9-48~~Table A.9-48~~*
	SOP Common Module	*ALWAYS*		*Table A.9-12~~Table A.9-12~~*

A.9.4.1 A.A.4.1 *<SR IOD 1>* Specific Modules

The tables below list modules and Attributes used in *<SR IOD1>:*

[List all IOD specific Modules in a separate table following the structure defined below, their Attributes, Values, usage, and conditions in the Table below. For instructions on the content of the columns see instructions in Section A.A Information Object Definitions (IODs)~~A.A Information Object Definitions (IODs)~~.]

Table A.9-46: SR Document Series Module used in *<SR IOD 1>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Modality	(0008,0060)	*FIXED*		*ALWAYS*	*SR*		
Referenced Performed Procedure Step Sequence	(0008,1111)	*GENERATED*	*ALWAYS*	*CONDITIONAL*	*(See Annex A.12 for details)*	*See Annex A.12*	
..							

Table A.9-47: SR Document General Module used in *<SR IOD 1>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Completion Flag	(0040,A491)	*GENERATED*	*ALWAYS*	*ALWAYS*	*<<PARTIAL COMPLETE>>*		
Verification Flag	(0040,A493)	*GENERATED*	*ALWAYS*	*ALWAYS*	*<<UNVERIFIED VERIFIED>>*		
Content Date	(0008,0023)	*GENERATED*	*ALWAYS*	*ALWAYS*	*Current date*		
Content Time	(0008,0033)	*GENERATED*	*ALWAYS*	*ALWAYS*	*Current time*		
Referenced Request Sequence	(0040,A370)	*GENERATED*	*ALWAYS*	*CONDITIONAL*	*See Annex A.12*	*See Annex A.12*	
…							

Table A.9-48: SR Document Content Module used in *<SR IOD 1>*

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
Value Type	(0040,A040)	*FIXED*	*ALWAYS*	*ALWAYS*	*CONTAINER*		
Continuity of Content	(0040,A050)	*FIXED*	*ALWAYS*	*ALWAYS*	*SEPARATE*		
Content Template Sequence	(0040,A504)	*GENERATED*	*ALWAYS*	*ALWAYS*	*See Annex A.10 for encoding on supported TIDs*		

A.9.4.2 A.A.4.2 *<SR IOD 1>* Functional Group Macros – N/A

N/A

A.9.4.3 A.A.4.3 *<SR IOD 1>* Private Modules

[List all private Attributes added specifically for this IOD here. Mark this section as N/A if there are none.]

A.9.4.4 A.A.4.4 *<SR IOD 1>* Coded Values

Table A.9-49~~Table A.9-49~~ lists Coded Values referenced from the “Value” column of the tables above for <*SR IOD1*>:

[Document Coded Terms and Code Stringe values in the following table. Coded Terms must be documented as (Code Value, Coding Scheme Designator, “Code Meaning”.]

Table A.9-49: Values and Codes Sets used in *<SR IOD 1>*

Attribute Name	Tag	Value/Code	Condition	Comments

A.9.5 A.A.5 Basic Directory IOD

Table A.9-50~~Table A.9-50~~ defines the structure of the Basic Directory IOD.

Table A.9-50: Basic Directory IOD

Attribute Name	Tag	Source	Presence of Attribute	Presence of Value	Value	Conditions	Comments
File Set Identification Module							
File-set ID	(0004,1130)	GENERATED					
Specific Character Set of File-set Descriptor File	(0004,1142)	GENERATED					
Directory Information Module							
Offset of the First Directory Record of the Root Directory Entity	(0004,1200)	GENERATED					
Offset of the Last Directory Record of the Root Directory Entity	(0004,1202)	GENERATED					
File-set Consistency Flag	(0004,1212)	GENERATED					
Directory Record Sequence	(0004,1220)	GENERATED					
>Offset of the Next Directory Record	(0004,1400)	GENERATED					
>Record In-use Flag	(0004,1410)	GENERATED					
>Offset of Referenced Lower-Level Directory Entity	(0004,1420)	GENERATED					
>Directory Record Type	(0004,1430)	GENERATED					
>Referenced File ID	(0004,1500)	GENERATED					
>Referenced SOP Class UID in File	(0004,1510)	SRC_INSTANCE					

>Referenced SOP Instance UID in File	(0004,1511)	SRC_INSTANCE					
>Referenced Transfer Syntax UID in File	(0004,1512)	SRC_INSTANCE					
Patient Keys							
>Specific Character Set	(0008,0005)	GENERATED					
>Patient's Name	(0010,0010)	SRC_INSTANCE					
>Patient ID	(0010,0020)	SRC_INSTANCE					
…							
Study Keys							
>Study Date	(0008,0020)	SRC_INSTANCE					
>Study Time	(0008,0030)	SRC_INSTANCE					
>Study Description	(0008,1030)	SRC_INSTANCE					
>Study Instance UID	(0020,000D)	SRC_INSTANCE					
>Study ID	(0020,0010)	SRC_INSTANCE					
>Accession Number	(0008,0050)	SRC_INSTANCE					
…							
Series Keys							
>Specific Character Set	(0008,0005)	GENERATED					
>Modality	(0008,0060)	SRC_INSTANCE					

>Series Instance UID	(0020,000E)	SRC_INSTANCE					
>Series Number	(0020,0011)	SRC_INSTANCE					
…							
Image Keys							
>Specific Character Set	(0008,0005)	GENERATED					
>Instance Number	(0020,0013)	SRC_INSTANCE					
>Samples per Pixel	(0028,0002)	SRC_INSTANCE					
>Photometric Interpretation	(0028,0004)	SRC_INSTANCE					
>Rows	(0028,0010)	SRC_INSTANCE					
>Columns	(0028,0011)	SRC_INSTANCE					
>Bits Allocated	(0028,0100)	SRC_INSTANCE					
>Bits Stored	(0028,0101)	SRC_INSTANCE					
>High Bit	(0028,0102)	SRC_INSTANCE					
>Pixel Representation	(0028,0103)	SRC_INSTANCE					
…							
SR Document Keys							
>Specific Character Set	(0008,0005)	GENERATED					
>Instance Number	(0020,0013)	SRC_INSTANCE					

>Completion Flag	(0040, A491)	SRC_INSTANCE					
>Verification Flag	(0040, A493)	SRC_INSTANCE					
>Content Date	(0008,0023)	SRC_INSTANCE					
>Content Time	(0008,0033)	SRC_INSTANCE					
>Verification DateTime	(0040,A030)	SRC_INSTANCE					
>Concept Name Code Sequence	(0040,A043)	SRC_INSTANCE					
>>Code Value	(0008,1000)						
>>Coding Scheme Designator	(0008,1002)						
>>Coding Scheme Version	(0008,1003)						
>>Code Meaning	(0008,1004)						

A.9.6 A.A.6 *<Private IOD 1>*

Table A.9-51~~Table A.9-51~~ defines the structure of *<Private IOD 1>.*

[Provide a list of all Modules, their presence, conditions in which they will be present and a reference to a table with the detailed module description. Below is an example for a Private IOD.]

Table A.9-51: *<Private IOD 1>*

IE	Module Name	Presence (Module)	Condition	Reference
Patient	*Patient Module*	*ALWAYS*		*Table A.9-1~~Table A.9~~* Formatte
Study	*General Study Module*	*ALWAYS*		*Table A.9-2~~Table A.9~~* Formatte
Series	*General Series Module*	*ALWAYS*		*Table A.9-3~~Table A.9~~* Formatte
Frame of Reference	*Frame of Reference*	*ALWAYS*		*Table A.9-4~~Table A.9~~* Formatte

IE	Module Name	Presence (Module)	Condition	Reference
Equipment	*General Equipment Module*	*ALWAYS*		*Table A.9-5~~Table A.9~~*
	Private Module 1	*CONDITIONAL*	*Present for Acquisition Protocol XXX*	*Table A.9-20~~Table A.9-20~~*
	Private Module 2	*ALWAYS*		*Table A.9-21~~Table A.9-21~~*
	Private Module 4	*ALWAYS*		*Table A.9-52~~Table A.9-52~~*
	Private Module 5	*ALWAYS*		*Table A.9-54~~Table A.9-54~~*
Image	*SOP Common Module*	*ALWAYS*		*Table A.9-12~~Table A.9-12~~*

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A.9.6.1 A.A.6.1 <*Private IOD 1*> Specific Modules - *NA*

N/A

A.9.6.2 A.A.6.2 <*Private IOD 1* >Functional Group Macros

[For <Private IODs> provide the list of shared Functional Group Macros and per-frame Functional Group Macros. Create one table for each supported Functional Group Macro using the structure defined below.]

A.9.6.3 A.A.6.3 <*Private IOD 1*> Private Modules

The tables below list Private Modules and Attributes specific for *<Private IOD 1>:*

[List all IOD specific Modules in a separate table following the structure defined below, their Attributes, Values, usage, and conditions in the table below. For instructions on the content of the columns see instructions in Section A.A Information Object Definitions (IODs).]

Table A.9-52: Private Module 4 for <*Private IOD 1*>

Attribute Name	Tag	VR	VM	Identifiable Information	Source	Presence of Attribute	Presence of Value	Value	Condition	Description
Private Module 4										
Private Creator	*(0035,00xx)*	*LO*	*1*							
Private Attribute 6	*(0035,xx01)*	*CS*	*1*	*SAFE*				*PRIVATE CREATOR*		
								TERM1		

Table A.9-53: Private Module 5 for *<Private IOD 1>*

Attribute Name	Tag	VR	VM	Identifiable Information	Source	Presence of Attribute	Presence of Value	Value	Condition	Description
Private Module 5										
Private Creator	*(0039,00yy)*	*LO*	*1*					*PRIVATE CREATOR 5*		
Private Attribute 7	*(0039,yy01)*	*CS*	*1*	*UNSAFE*				*See Table A.9-54~~Table A.9-54~~ below*		Formatte

5870 **A.9.6.4 A.A.6.4 *<Private IOD 1>* Coded Values**

Table A.9-54~~Table A.9-54~~ lists Coded Values referenced from the "Value" column of the tables above for *<Private IOD 1>:*

[Document Coded Terms and Code String values in the following table. Coded Terms must be documented as (Code Value, Coding Scheme Designator, "Code Meaning".]

5875 **Table A.9-54: Values and Code Sets for *<Private IOD 1>***

Attribute Name	Tag	Value/Code	Condition	Comments
Private Attribute 7	*(0039,yy01)*	*TERM1*	*Color Image*	
		TERM2	*Grayscale Image*	

A.10 A.B Structured Report Content Encoding

[Note that the appendices defined in the following subsections are a mandatory part of the DICOM Conformance Statement and must be filled in by any product, that creates DICOM SR objects.]

[For each SR TID (including Private TIDs) that is created by the system (See Overview Section A.1.1.1) provide an Annex B.x.]

[If you are extending a TID by adding additional concepts indicate this extension by adding an asterisk to the TID number in the last column (e.g.,4000).]*

[If your product creates SR Instances of a TID which includes long lists of measurements, they can also be documented in an external file. For details refer to the instructions right before Section A.10.2.]

This section provides the detailed content encoding for all TIDs supported by *<product>.*

Throughout the tables listed in Annes A.10 the following codes are used for the “Source” and “Presence of Content Item” columns.

In the “Source” column, the following Values can be used:

- FIXED: The Value is pre-defined and cannot be modified.
- GENERATED: The Value is generated by the system.
- CONFIGURATION: The Value is copied from the system configuration.
- MWL: The Value is copied from a Modality Worklist entry.
- QUERY: The Value is determined by performing a query of any of the supported Query/Retrieve Services.
- USER: The Value is entered by the user.
- SCANNED: The Value is read from a barcode scanner or similar device.
- EMPTY: The Attribute is sent with a zero-length Value.
- SRC_INSTANCE: The Value is copied from previously created/received SOP Instances.

In the “Presence of Conten Item” the following Values can be used:

- ALWAYS: the module, functional group macro, Attributes or Value is always present.
- CONDITIONAL: the presence of the the module, functional group macro, Attributes or Value is dependent on a condition. The condition must be listed in the “Comments” column.
- SRC_COPY: The presence of the Attributes and Values depends on the availability of these in the source instances, which are used for copying this information.
- EMPTY: The Attribute is present but without a Value (zero length).

A.10.1 A.B.1 Mammography CAD SR (TID 4000)

Table A.10-1~~Table A.10-1~~ shows the encoding of content of a DICOM Mammography CAD SR (TID 4000).

[The following table shows how to document TID content usage, with TID 4000 as an example. Modify to match your product implementation, e.g., select supported concepts and Values and add additional templates as needed. In the “Value” column you can either list the coded Values directly, reference a CID from DICOM PS3.16 if used unmodified or provide a table in Section A.10.1.1, if you are using more than two codes (otherwise codes can be added directly to the table). For more complex TIDs it is possible to split the table below into multiple tables following the Template Structure defined in DICOM PS 3.16.]

Table A.10-1: Mammography CAD SR (TID 4000)

NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
		CONTAINER	*(111036, DCM, "Mammography CAD Report")*				*4000*	
>	*HAS CONCEPT MOD*	*CODE*	*(121049, DCM, "Language of Content Item and Descendants")*	*CONFIGURATION*		*(en, RFC3066, "English")*	*1204*	
>>	*HAS CONCEPT MOD*	*CODE*	*(121046, DCM, "Country of Language")*	*CONFIGURATION*		*(US, ISO3166_1, "United States of America (the)")*	*1204*	
>	*CONTAINS*	*CONTAINER*	*(111028, DCM, "Image Library")*				*4020*	
>>	*CONTAINS*	*IMAGE*					*4020*	
>>>	*HAS ACQ CONTEXT*	*CODE*	*(111027, DCM, "Image Laterality")*	*SRC_INSTANCE*		*See CID 6023 "Side"*	*4020*	
>>>	*HAS ACQ CONTEXT*	*CODE*	*(111031, DCM, "Image View")*	*SRC_INSTANCE*		*See CID 4014 "View for Mammography"*	*4020*	
>>>>	*HAS CONCEPT MOD*	*CODE*	*(111032, DCM, "Image View Modifier")*	*SRC_INSTANCE*		*See Table A.10-2~~Table A.10-2~~ below*	*4020*	
>>>	*HAS ACQ CONTEXT*	*TEXT*	*(111044, DCM, "Patient Orientation Row")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*TEXT*	*(111043, DCM, "Patient Orientation Column")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*DATE*	*(111060, DCM, "Study Date")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*TIME*	*(111061, DCM, "Study Time")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*DATE*	*(111018, DCM, "Content Date")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*TIME*	*(111019, DCM, "Content Time")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*NUM*	*(111026, DCM, "Horizontal Pixel Spacing")*	*SRC_INSTANCE*			*4020*	
>>>	*HAS ACQ CONTEXT*	*NUM*	*(111066, DCM, "Vertical Pixel Spacing")*	*SRC_INSTANCE*			*4020*	
>	*CONTAINS*	*CODE*	*(111017, DCM, "CAD Processing and Findings Summary")*	*GENERATED*		*See CID 6047 "CAD and Processing Findings Summary"*	*4001*	

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NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
>>	HAS PROPERTIES	TEXT	(111033, DCM, "Impression Description")	GENERATED		(Description, e.g. Breast density evaluation)	4002	
>>	HAS PROPERTIES	TEXT	(111001, DCM, "Algorithm Name")	GENERATED		(Algorithm Name, e.g. Breast Density Assessment)	4019	
>>	HAS PROPERTIES	TEXT	(111003, DCM, "Algorithm Version")	GENERATED		(Version, e.g. 1.1.1.1)	4019	
>>	HAS PROPERTIES	NUM	See CID 6142 Calculated Value	GENERATED			4002	
>>>	HAS CONCEPT MOD	CODE	(272741003, SCT, "Laterality")	GENERATED		See CID 6023 "Side"	4002	
>>>	HAS CONCEPT MOD	CODE	(121401, DCM, "Derivation")	GENERATED		See CID 6140 "Calculation Mehtod"	4002	
>>	INFERRED FROM	CONTAINER	(111034, DCM, "Individual Impression/ Recommendation")	GENERATED			4003	
>>>	HAS CONCEPT MOD	CODE	(111056, DCM, "Rendering Intent")	GENERATED		See CID 6034 "Intended Use of CAD Output"	4003	
>>>	CONTAINS	CODE	(111059, DCM, "Single Image Finding")	GENERATED		See Table A.10-3~~Table A.10-3~~ below	4006	
>>>>	HAS CONCEPT MOD	CODE	(111056, DCM, "Rendering Intent")	GENERATED		See CID 6034 "Intended Use of CAD Output"	4006	
>>>>	HAS PROPERTIES	TEXT	(111001, DCM, "Algorithm Name")	GENERATED			4019	
>>>>	HAS PROPERTIES	TEXT	(111003, DCM, "Algorithm Version")	GENERATED			4019	
>>>>	HAS PROPERTIES	SCOORD	(111010, DCM, "Center")	GENERATED			4021	
>>>>>	R-SELECTED FROM	IMAGE		GENERATED			4021	
>>>>	HAS PROPERTIES	SCOORD	(111041, DCM, "Outline")	GENERATED			4021	
>>>>>	R-SELECTED FROM	IMAGE		GENERATED			4021	
>>>	CONTAINS	CODE	(111059, DCM, "Single Image Finding")	GENERATED		(129715009, SCT, "Breast Composition")	4006	
>>>>	HAS CONCEPT MOD	CODE	(111056, DCM, "Rendering Intent")	GENERATED		See CID 6034 "Intended Use of CAD Output"	4006	

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NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
>>>>	HAS PROPERTIES	TEXT	(111001, DCM, "Algorithm Name")	GENERATED			4019	
>>>>	HAS PROPERTIES	TEXT	(111003, DCM, "Algorithm Version")	GENERATED			4019	
>>>	HAS PROPERTIES	CODE	(SCT, 129715009, "Breast Composition")	GENERATED		See DCID 6000, "Overall Breast Composition"	4007	
>	CONTAINS	CODE	(111064, DCM, "Summary of Detections")	GENERATED		See CID 6042 "Status of Results"	4000	
>>	INFERRED FROM	CONTAINER	(111063, DCM, "Successful Detections")	GENERATED			4015	
>>>	CONTAINS	CODE	(111022, DCM, "Detection Performed")	GENERATED		See Table A.10-3~~Table A.10-3~~ below	4017	
>>>>	HAS PROPERTIES	TEXT	(111001, DCM, "Algorithm Name")	GENERATED			4019	
>>>>	HAS PROPERTIES	TEXT	(111003, DCM, "Algorithm Version")	GENERATED			4019	
>>>>	R-SELECTED FROM	IMAGE		GENERATED			4021	
>	CONTAINS	CODE	(111065, DCM, "Summary of Analyses")	GENERATED		See DICID 6042, "Status of Results"	4000	
>>	INFERRED FROM	CONTAINER	(111062, DCM, "Successful Analyses")	GENERATED			4016	
>>>	CONTAINS	CODE	(111004, DCM, "Analysis Performed")			See CID 6043, "Types of Mammography CAD Analysis"	4018	
>>>>	HAS PROPERTIES	TEXT	(111001, DCM, "Algorithm Name")	GENERATED			4019	
>>>>	HAS PROPERTIES	TEXT	(111003, DCM, "Algorithm Version")	GENERATED			4019	

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NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
>>>> >	*R-HAS PROPERTIES*	*IMAGE*		*GENERATED*			*4021*	

5920 **A.10.1.1 A.B.1.1. Code Sets**

The following tables list specific code sets referenced from the Mammography CAD SR (TID 4000).

Table A.10-2: Mammography CAD SR -Image View Modifier Codes

Coding Scheme Designator	Code Value	Code Meaning
SCT	*399161006*	*Cleavage*
SCT	*399011000*	*Axillary Tail*
SCT	*399197002*	*Rolled Lateral*
SCT	*399226006*	*Rolled Medial*
SCT	*414493004*	*Rolled Inferior*
SCT	*415670009*	*Rolled Superior*

Table A.10-3: Mammography CAD SR - Singe Image Finding Codes

Coding Scheme Designator	Code Value	Code Meaning
SCT	*129793001*	*Mammography breast density*
SCT	*129770007*	*Individual Calcification*
SCT	*129769006*	*Calcification Cluster*

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A.10.2 A.B.2 Echocardiography Procedure Result SR (TID 5200)

Table A.10-4~~Table A.10-4~~ shows the encoding of content of a DICOM Echocardiography Procedure Report (TID 5200).

[The following table shows how to document TID content usage, with TID 5200 as an example." Modify to match your
5930 *product implementation, e.g. select supported concepts and Values, and add additional templates as needed.]*

Table A.10-4: Echocardiography Procedure Report SR (TID 5200)

NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
		CONTAINER	*EV (125200, DCM, "Adult Echocardiography Procedure Report")*				*5200*	
>	*HAS CONCEPT MOD*	*CODE*	*(121049, DCM, "Language of Content Item and Descendants")*	*CONFIGURATION*		*(en, RFC3066, "English")*	*1204*	
>>	*HAS CONCEPT MOD*	*CODE*	*(121046, DCM, "Country of Language")*	*CONFIGURATION*		*(US, ISO3166_1, "United States of America (the)")*	*1204*	

NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
>	HAS OBS CONTEXT	CODE	(121005, DCM, "Observer Type")	GENERATED		(121006, DCM, "Person")	1002	
>	HAS OBS CONTEXT	PNAME	EV (121008, DCM, "Person Observer Name")	CONFIGURATION			1003	
>	CONTAINS	CONTAINER	EV (121118, DCM, "Patient Characteristics"	GENERATED			5201	
>>	CONTAINS	NUM	(121118, DCM, “Subject Age“)	GENERATED			5201	Calculated from Date of Birth
>>	CONTAINS	CODE	EV (121032, DCM, "Subject Sex")	MWL		See CID 7455 “Sex”	5201	
>>	CONTAINS	NUM	(8277-6, LN, "Body Surface Area")	GENERATED			5201	
>>>	INFERED FROM	CODE	(8278-4, LN, "Body Surface Area Formula")	GENERATED		See CID 3663 “Body Surface Area Equations”	5201	
>	CONTAINS	CONTAINER	(59776-5, LN, "Findings")	GENERATED		One Container for each supported Finding Site, see Sections A.10.2.1.1 below	5202	
The following rows are supported for all Finding Sites listed in Section A.10.2.1. Values for supported concepts are listed in the “Modifier” column of the Tables in the respective subsections of Section A.10.2.1.								
>>	HAS CONCEPT MOD	CODE	(363698007, SCT “Finding Site“	GENERATED		See TID 5200 for supported Finding Sites	5202	
>>	CONTAINS	CONTAINER	(125007, DCM, “Measurement Group)				5202	
>>>	CONTAINS	NUM	See Section A.10.2.1 for measurements and supported Modifiers for each Finding Site				300	
>>>>	HAS CONCEPT MOD	CODE	(370129005, SCT, "Measurement Method")	GENERATED		See CID 12227 “Echocardiography Measurement Method”	300	
>>>>	HAS CONCEPT MOD	CODE	(363698007, SCT, "Finding Site")	GENERATED		See CID 12236 “Echo Anatoic Sites"	300	

NL	Rel with Parent	VT	Concept Name	Source	Presence of Content Item	Values	TID	Comments
>>>>	*HAS CONCEPT MOD*	*CODE*	*(26067400, SCT, "Flow Direction")*	*GENERATED*		*See CID 12221 "Flow Direction"*	*5203*	
>>>>	*HAS CONCEPT MOD*	*CODE*	*(272517003, SCT, "Respiratory Cycle Point")*	*GENERATED*		*See CID 12234 "Respiration State"*	*5203*	
>>>>	*HAS CONCEPT MOD*	*CODE*	*(272518008, SCT, "Cardiac Cycle Point")*	*GENERATED*		*See CID 12233 "Cardiac Phase"*	*5203*	
>>>>	*HAS CONCEPT MOD*	*CODE*	*(399264008, SCT, "Image Mode")*	*GENERATED*		*See CID 12224 "Ultrasound Image Modes"*	*5203*	
>>>>	*HAS CONCEPT MOD*	*CODE*	*(111031, DCM, "Image View")*	*GENERATED*		*See CID 12002 "Ultrasound Protocol Stage Types"*	*5203*	

A.10.2.1 A.B.2.1. Measurement Encoding

The following Sections provide a list of measurements encoded for each Finding Site.

[Since the lists of measurements can be fairly extensive, they can either be provided in a separate excel sheet minimally providing columns for

- *Label*
- *The encoding of the measurement using Coding Scheme Designator, Code Value and Code Meaning*
- *One column for each supported modifier (Image Mode, Image View, Measurement Method, Cardiac Cycle Point, …]*
- *The unit code for the measurement using Coding Scheme Designator, Code Value and Code Meaning.]*

[If you use an external document, state the following:]

Details about the supported measurements can be found at *<link to external document>.*

[If measurements are documented in this document, add for each supported Finding Site a subsection with all supported Measurements and their modifiers below following the examples shown.]

A.10.2.1.1 A.B.2.1.1 Left Ventricle

Table A.10-5~~Table A.10-5~~ lists the measurements supported by <product>. The first column lists the label that is used on *<products reporting screen>* to select the respective measurements.

[Document all measurements supported on the product using the relevant measurements. Modify to match your product implementation, e.g., select supported concepts and Values, and add additional templates as needed. If private codes are used, indicate them through a 99_VENDOR_X Coding Scheme Designator, where VENDOR_X needs to be replaced with a vendor specific Value.]

[In the "Modifier" column list all supported modifiers by using the Concept Name Code from Table A.10-4~~Table A.10-4~~ in Section A.10.2 and add a code for each Modifier Value.]

Table A.10-5: Left Ventricle Measurements

Label	Measurement	Modifier		Unit
Echo Section (TID 5202) – Left Ventricle, (363698007, SCT, "Finding Site"): (87878005, SCT, " Left Ventricle")				
LV CI A2C MOD	*(54993008, "SCT, Cardiac Index")*	*(399264008, SCT, "Image Mode")*	*(399064001, SCT, "2D mode")*	*(l/min/m2, UCUM, "l/min/m2")*
		(111031, DCM, "Image View")	*(399232001, SCT, "Apical two chamber")*	
		(370129005, SCT, "Measurement Method")	*(125208, DCM, "Method of Disks, Single Plane")*	
LVID d PSAX A-P	*(LVID_AP, 99VENDOR_X, Left Ventricle Internal Dimension A-P")*	*(272518008, SCT, "Cardiac Cycle Point")*	*(90892000, SCT, "Diastole")*	*(l/min/m2, UCUM, "l/min/m2")*
		(111031, DCM, "Image View")	*(399271003, SCT, "Parasternal short axis at the Papillary Muscle level")*	
		(399264008, SCT, "Image Mode")	*(399064001, SCT, "2D mode")*	
…				

A.10.2.1.2 A.B.2.2.2 Right Ventricle

Table A.10-6~~Table A.10-6~~ list the measurements supported by <product>. The first column lists the label that is used on *<products reporting screen>* to select the respective measurements.

Table A.10-6: Right Ventricle Measurements

Label	Measurement	Modifier		Unit
Echo Section (TID 5202) – Right Ventricle (363698007, SCT, "Finding Site"): (53085002, SCT, "Right Ventricle")				
RV Area s A4C	*(42798000, SCT "Area")*	*(272518008, SCT, "Cardiac Cycle Point")*	*(111973004, SCT, "Systole")*	*(cm2/m2, UCUM, "cm2/m2")*
		(111031, DCM, "Image View")	*(399214001, SCT "Apical four chamber")*	
		(399264008, SCT, "Image Mode")	*(399064001, SCT, "2D mode")*	
		(370129005, SCT, "Measurement Method")	*(125208, DCM, "Method of Disks, Single Plane")*	
…				

A.11 A.C Security Details

[This section contains several subsections that describe information that may already be present in other security documents (e.g., MDS2 statement). For each subsection, you may fill it in or remove it and reference a separate security document if all information requested in this template is present in the separate referenced document.]

This section provides additional details about security features that are formally described in Section A.8.

A.11.1 A.C.1 External Network Requirement Details

A.11.1.1 A.C.1.1 Basic Time Synchronization

[If your product is following RFC 8633, mention it here, otherwise describe what is implemented, e.g.:

- *If your product is able to perform the Find NTP Servers Transaction using DCP when no server has been found through use of NTP, then describe it here.*
- *State here what the product does if no NTP Servers are available or reference the product manual section describing what to do in such a case.]*

A.11.1.2 A.C.1.2 Basic Network Address Management

[If this application supports the Basic Network Address Management profile as a DHCP Client, specify here how the DHCP Server is discovered.

If DNSSEC is supported (RFCs 4033, 4034, 4035) for the interactions defined in Basic Network Address Management profile, describe the options supported here or provide a reference to the document describing them.]

A.11.1.3 A.C.1.3 Application Configuration Management

Table A.11-1~~Table A.11-1~~ defines the security patterns supported*:*

[Specify here which security pattern(s) your LDAP Client and/or LDAP Server implementation supports. Remove any actor not supported.]

Table A.11-1: LDAP Security Patterns

Actor	LDAP Security Pattern	Supported	Comments
LDAP Server	TLS		
	TLS-Manual		
	Basic		
	Basic-Manual		
	Anonymous		
	Anonymous-Manual		
	[Additional pattern]		
LDAP Client	TLS		
	TLS-Manual		
	Basic		
	Basic-Manual		
	Anonymous		
	Anonymous-Manual		

	[Additional pattern]		

A.11.1.4 A.C.1.4 DNS Service Discovery

[If DNSSEC is supported (RFCs 4033, 4034, 4035) for the interactions to achieve DNS Service Discovery, describe the options supported here or provide a reference to the document describing them.]

A.11.2 A.C.2 DICOM Security Profile Details

A.11.2.1 A.C.2.1 Online Electronic Storage Secure Use

[Indicate here how the product restricts remote access (User Access, Access per Patient, Access per Doctor). If this information is described in a separate document, provide the reference here instead.]

A.11.2.2 A.C.2.2 Audit Trail Messages

Table A.11-2~~Table A.11-2~~ specifies the DICOM Audit Messages that <*Product*> can detect and report. It defines the list of triggers that will cause the Audit Message to be generated and if these triggers can be configured or not. It also specifies whether the content of the Audit Message can be configured or not.

[Indicate with Y (yes) or N (no) in the "Used" column to specify if your product supports the Audit Message. Then describe the list of triggers in the "Supported Triggers" column that make your product generate the Audit Message. Indicate with Y or N in the "Configurable Triggers" or "Configurable Message" columns whether these features are supported by your product.]

Table A.11-2: DICOM Specific Audit Messages

Audit Message	Used	Supported Triggers	Configurable Triggers	Configurable Message	Comments
Application Activity					
Audit Log Used					
Begin Transferring DICOM Instances					
Data Export					
Data Import					
DICOM Instance Accessed					
DICOM Instance Transferred					
DICOM Study Deleted					
Network Entry					
Query					
Security Alert					
User Authentication					
Order Record					
Patient Record					
Procedure Record					
[Other Message]					

[The following part of this section can be either defined in the DCS or defined as a reference to a Service/Security Manual instead. In either case, all private messages will be described in addition to standard defined messages. As an example, the following table format may be used to describe these messages in this document.]

Table A.11-3~~Table A.11-3~~ specifies the implementation details of each audit message supported by this product.

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Table A.11-3: Audit Message Details

Real-World Entities	***Field Name***	***Supported***	***Value Constraints***
Application Activity Message			
Event	*EventID*		*EV (110100, DCM, "Application Activity")*
	EventActionCode		
	EventDateTime		
	EventOutcomeIndicator		
	EventTypeCode		
Active Participant: *Application started (1)*	*UserID*		
	AlternativeUserID		
	UserName		
	…		
…	…	…	…

[Any extension]	…	…	…
Audit Log Used Message			
…	…	…	…
…			
[Other message]			

6020 **A.11.2.3 A.C.2.3 Audit Trail Message Transmission Profile – SYSLOG – TLS**

See Section A.6.6 Audit Trail Syslog Configuration for information about Syslog-TLS parameters.

A.11.2.4 A.C.2.4 Audit Trail Message Transmission Profile – SYSLOG – UDP

See Section A.6.6 Audit Trail Syslog Configuration for information about Syslog-UDP parameters.

A.11.2.5 A.C.2.5 Secure Transport Connection Details

6025 Table A.11-4~~Table A.11-4~~ lists the secure transport connection profiles and cipher suites supported:

[Describe here the mechanisms and tools that are supported by the implementation for Certificate Distribution, Certificate Validation and Key Management.]

[In the table below, add any Profile claimed in Section A.8.4.2, Secure Transport Connection Profiles~~Secure Transport Connection Profiles~~. For each Profile, list all Cipher suites supported by your product and fill in the "Default
6030 *Preference Order" column if applicable.]*

Table A.11-4:Secure Transport Connection Profiles and Cipher Suites

Profile	Cipher Suite	Default Preference Order (from 1=preferred to n=less preferred)
Non-Downgrading BCP195 TLS Secure Transport Connection	*TLS_DHE_RSA_WITH_AES_128_GCM_SHA256*	
	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256	
	TLS_DHE_RSA_WITH_AES_256_GCM_SHA384	
	TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384	
	[Other Cipher Suites]	
[Any TLS Profile supported by <product>]	*[Any Cypher suite]*	

Table A.11-5~~Table A.11-5~~ describes the configurable parameters and behaviors supported by this product for the Secure Transport Connection:

6035 *[Indicated in the "Configurable" column whether the parameters are configurable (Y) or not (N).]*

Table A.11-5: Secure Transport Connection Configuration

Local Secure Transport Connection Configuration			
Parameter/Behavior	**Configurable**	**Default Value**	**Comments**
Common Secure Transport Connection parameters			
Port	See Section A.6 Configuration		
A-P-ABORT provider reason in case of integrity check failure			
…	…		
BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			
Non-Downgrading BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			
Extended BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			
Other Profile Secure Transport Connection parameters			
Remote Secure Transport Connection Configuration Parameters			
Parameter	**Configurable**	**Default Value**	**Comments**
Common Secure Transport Connection Parameters			
Port	See Section A.6 Configuration		
A-P-ABORT provider reason in case of integrity check failure			
…	…		
BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			
Non-Downgrading BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			

Extended BCP195 TLS Secure Transport Connection Parameters			
[List specific configurable parameters for the local system]			
<Other Profile> Secure Transport Connection Parameters			

A.11.2.6 A.C.2.6 Attribute Confidentiality Details

Table A.11-6~~Table A.11-6~~ provides the list of Attributes and the action when de-identifying instances. Supported Action Codes are defined in PS 3.15 Section E.1.

[For every element listed in the table below, describe the Action the application may take using one of the actions codes defined below:]

- *D: replace with a non-zero length Value that may be a dummy Value and consistent with the VR*
- *Z: replace with a zero-length Value, or a non-zero length Value that may be a dummy Value and consistent with the VR*
- *X: remove*
- *K: keep (unchanged for non-sequence Attributes, cleaned for sequences)*
- *C: clean, that is replace with Values of similar meaning known not to contain identifying information and consistent with the VR*
- *U: replace with a non-zero length UID that is internally consistent within a set of Instances*
- *Z/D: Z unless D is required to maintain IOD conformance (Type 2 versus Type 1)*
- *X/Z: X unless Z is required to maintain IOD conformance (Type 3 versus Type 2)*
- *X/D: X unless D is required to maintain IOD conformance (Type 3 versus Type 1)*
- *X/Z/D: X unless Z or D is required to maintain IOD conformance (Type 3 versus Type 2 versus Type 1)*
- *X/Z/U*: X unless Z or replacement of contained instance UIDs (U) is required to maintain IOD conformance (Type 3 versus Type 2 versus Type 1 sequences containing UID references)*

[Indicated in the "Encrypted" column, whether encryption is supported. Y for yes, N for No.]

Table A.11-6: De-identified Elements and Actions

Attribute Name	Tag	Action	Encrypted	Comments
Basic Profile Option				
<Element name>	*<(xxxx,yyyy)>*			*[In case of dummy Value, describe here the algorithm that produces the Value]*
[Additional Private Option]				

[Explain the scope here in which the application can ensure referential integrity of replacement Values for references such as SOP Instance UID, Frame of Reference UID, etc. if multiple SOP Instances are de-identified (e.g., across multiple Studies, consistent replacement if the same Study is processed more than once, etc.)

Also mention if Encrypted Attributes Data Set is to be used and which Transfer Syntaxes are supported for encoding/decoding the Encrypted Attributes Data Set.

Finally, list here any additional restrictions (e.g. key sizes for public keys).]

A.11.2.7 A.C.2.7 Digital Signature Details

[Describe here the details of any Digital Signature Profile that your product may support. Put "N/A" if none.]

A.11.2.8 A.C.2.8 Additional DICOM Security Profile Details

[Describe here the details of any additional DICOM Security Profile that your product may support. Put "N/A" if none.]

A.12 A.D Mapping of Attributes

[Describe the Mapping of Attributes in this Annex, create a subsection for each mapping. Examples for such mappings are:

- *The mapping of the HL7 Order information into the return keys of the Modality Worklist query*
- *The mapping between Modality Worklist, Instances and MPPS messages*
- *The mapping between DICOM SR instances and reports in CDA format]*

[The following subsection shows an example for the Mapping between Modality Worklist Instances and MPPS.]

A.12.1 A.D.1 Mapping between Modality Worklist Instances and MPPS

Table A.12-1~~Table A.12-1~~ describes the mapping of Attributes between Modality Worklist Instances and MPPS messages.

In the "Scenario" column the following Values are used:

[List the different scenarios which your product supports for mapping Attributes and use those Values in the table below in the "Scenario" column. The list below represents an example that is derived from the IHE Radiology Technical Framework - Vol. 2; however, you can define your own scenarios or modify the list below. All entries in the list need to occur as permanent text in your DICOM Conformance Statement.

- *SCHEDULED: The image acquisition was scheduled at the RIS and procedure details have been communicated in the MWL query)*
- *UNSCHEDULED: The image acquisition was performed without Modality Worklist information*
- *APPEND: Instances acquired are added to an existing study after the initial procedure was finalized*
- *GROUP: Multiple requested procedures are grouped into one study.]*

In the "Value Source" columns, the following Values are used. The column cell may additionally contain an Attribute Tag if the value is copied from a different Attribute.

- GENERATED: The Value is generated by the system.
- SRC_INSTANCE: The Value is copied from previously created instances.
- MWL: The Value is copied from a Modality Worklist entry.

- USER: The Value is entered by the user.
- SCANNED: The Value is read from a barcode scanner or similar device.
- EMPTY: The Attribute is sent with a zero-length Value.

The “Destination” columns either contain TOP, if the Attribute is added to the top level Data Set of the Instance, or contain the Attribute Tag of the Sequence the Attribute will be added to. The “Comments” column can be used to provide additional information regarding the Values added to the Instance or MPPS.

[Update the Table to match your product implementation. The entries below are meant as an example.]

Table A.12-1: Mapping of Attributes from Modality Worklist to Instance and MPPS

Attribute Name in Image/MPPS	Tag	Scenario	Image		MPPS		Comments
			Value Source	Destination	Value Source	Destination	
Study Instance UID	*(0020,000D)*	*SCHEDULED*	*MWL*	*TOP*	*SRC_INSTANCE*	*(0040,0270)*	
		UNSCHEDULED	*GENERATED*	*TOP*	*EMPTY*	*(0040,0270)*	
		APPEND	*SRC_INSTANCE*	*TOP*	*SRC_INSTANCE*	*(0040,0270)*	
		GROUP	*SYSTEM*	*TOP*	*SRC_INSTANCE*	*(0040,0270)*[(a)]	*[(a)]One item per SPS in (0040, 0270)*
Accession Number	*(0008,0050)*	*SCHEDULED*	*MWL*	*TOP*	*SRC_INSTANCE*	*(0040,0270)*	
		UNSCHEDULED	*EMPTY*	*TOP*	*EMPTY*	*(0040,0270)*	
		APPEND	*SRC_INSTANCE*	*TOP*	*SRC_INSTANCE*	*(0040,0270)*	
		GROUP	*MWL;EMPTY*[(a)]	*TOP*	*MWL* [(b)]	*(0040,0270)*	*[(a)]If the Accession Number for all Requested Procedures is the same, use that in the Accession Number of the Instances. If different keep empty.* *[(b)]Copy Accession Number for each Requested Procedure into the item of the appropriate SPS*
Requested Procedure ID	*(0040,1001)*	*SCHEDULED*	*MWL*	*(0040,0275)*[(a)] *(0040,A370)*[(b)]	*SRC_INSTANCE*	*(0040,0270)*	*[(a)]for use in Image IODs)*

							[(b)] *for use in Evidence Documents*
		UNSCHEDULED	*N/A*	*N/A*	*EMPTY*	*(0040,0270)*	
		APPEND	*SRC_INSTANCE*	*(0040,0275)*[(a)] *(0040,A370)*[(b)]	*SRC_INSTANCE*	*(0040,0270)*	[(a)]*for use in Image IODs)* [(b)] *for use in Evidence Documents*
		GROUP					
Study ID	*(0020,0010)*	*SCHEDULED*	*MWL (0040, 1001)*	*TOP*	*SRC_INSTANCE*	*TOP*	*(0040,1001) is Requested Procedure ID*
		UNSCHEDULED	*GENERATED*	*TOP*	*SRC_INSTANCE*	*TOP*	
		APPEND	*SRC_INSTANCE (0040,1001)*	*TOP*	*SRC_INSTANCE*	*TOP*	*(0040,1001) is Requested Procedure ID*

A.13 A.E Code Set Usage

[This subsection is used to describe code set usage such as:

- *Handling of local procedure codes*
- *Handling of local formulary and drug codes*
- *Handling of retired or no longer used codes and code sets*
    - *Handling of the use of SNOMED RT vs SNOMED CT codes*
- *Handling of private codes*
- *Definition of vendor private codes]*

Retire Annex B to M