**DICOM Conformance Statement**

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

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.

# 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*

*]*

# 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, ….]*

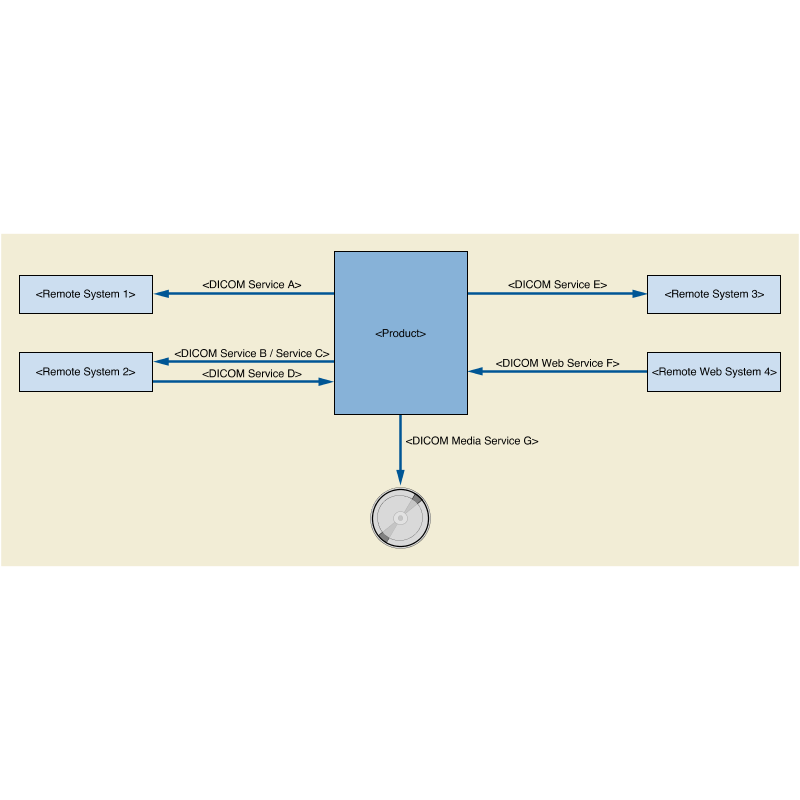


Figure ‎1‑1 Overview of Implemented Services

## Content and Transfer

Table ‎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 ‎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 ‎1‑2 *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 ‎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 ‎1‑3 | | | |
| *Mammography CAD SR Storage* | *1.2.840.10008.5.1.4.1.1.88.50* |  |  |  |  |  |  |  |  | *See* Table ‎1‑3 | | | |

*[*Table ‎1‑2 *defines some example Transfer Syntax Sets that are referenced by their abbreviation in* Table ‎1‑1 *above. You can modify the Transfer Syntax Sets 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 ‎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* |
| *Lossy Compressed Transfer Syntax Set (L)* | *JPEG Baseline (Process 1)* | *1.2.840.10008.1.2.4.50* | *image/jpeg* |
| *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* | *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* |

### Structured Reporting Root Template IDs

Table ‎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 ‎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 ‎B*.]*

Table ‎1‑3 Supported Root SR Template IDs (TIDs)

| **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* |  |
|  |  |  |  |  |  |

## DIMSE Services

### Verification

Table ‎1‑4 lists support for the Verification SOP Class.

*[Modify* Table ‎1‑4 *to reflect support for the Verification SOP Class.]*

Table ‎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 |  |  |

### Storage

For details on supported Storage SOP Classes see Section ‎1.1.

### Workflow Management

Table ‎1‑5 lists all supported Workflow Management SOP Classes.

*[Modify* Table ‎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 ‎1‑5 Workflow Management SOP Classes

| **SOP Classes** | | **Transfer Syntax** | | **SCU** | **SCP** |
| --- | --- | --- | --- | --- | --- |
| *Modality Worklist Information Model - FIND* | *1.2.840.10008.5.1.4.31* | *Implicit VR Little Endian* | *1.2.840.10008.1.2* |  |  |
| *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* |  |  |

### Query/Retrieve

Table ‎1‑6 lists all supported Query/Retrieve SOP Classes.

*[*Table ‎1‑6 *lists some SOP Classes for querying and retrieving from a remote DICOM node, nevertheless* [*PS3.4*](part04.html#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* Table ‎1‑6 *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* Table ‎1‑6*.]*

Table ‎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* |  |  |

### Printing

Table ‎1‑7 lists all supported Printing SOP Classes.

*[*Table ‎1‑7 *lists some SOP Classes for Printing and* [*PS3.4*](part04.html#PS3.4) *defines additional SOP Classes for printing. If your product supports any of these additional SOP Classes, add them to* Table ‎1‑7*, 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* Table ‎1‑7*.]*

Table ‎1‑7 Printing SOP Classes

| **SOP Classes** | | **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* | *Implicit VR Little Endian* | *1.2.840.10008.1.2* |  |  |
| *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* |  |  |

## DICOM Web Services

### URI Service (WADO-URI)

Table ‎1‑8 lists details on the support of the URI Service.

*[Complete* Table ‎1‑8 *to indicate support for the URI Web Service.]*

Table ‎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 ‎1‑1 in Section ‎1.1

### Studies Service

Table ‎1‑9 lists details on the support of the Studies Service.

*[Complete* Table ‎1‑9 *to indicate support for the Studies Web Service]*

Table ‎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 |  |  |

### Worklist Service

Table ‎1‑10 lists details on the support of the Worklist Service.

*[Complete* Table ‎1‑10 *to indicate support for the Worklist Web Service.]*

Table ‎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* |  |  |  |

### Non-Patient Instance Service

Table ‎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 ‎1‑1.

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

Table ‎1‑11 Non-Patient Instance Service

| **Service** | **Transaction** | **Resource** | **User Agent** | **Origin Server** |
| --- | --- | --- | --- | --- |
| Non-Patient Instances Web Service | Retrieve Capabilities |  |  |  |
| *Retrieve* |  |  |  |
| *Store* |  |  |  |
| *Search (Note)* |  |  |  |

### Storage Commitment Service

Table ‎1‑12 lists details on the support of the Storage Commitment Service.

*[Complete* Table ‎1‑12 *to indicate support for the Storage Commitment Web Service.]*

Table ‎1‑12 Storage Commitment Service

| **Service** | **Transaction** | **Resource** | **User Agent** | **Origin Server** |
| --- | --- | --- | --- | --- |
| Storage Commitment Service | *Request* | commitment-requests |  |  |
| *Result Check* | commitment-requests |

## Media Services

Table ‎1‑13 lists all supported Media Application Profiles.

*[*Table ‎1‑13 *lists Media Storage Application profiles and supported roles. Extend/modify the Table to list the profiles supported by your system.]*

Table ‎1‑13 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* |  |  |  |

## Real-Time Video Service

Table ‎1‑14 lists all supported Real-Time Video SOP Classes and Transfer Syntaxes.

*[List all supported Real-Time Video SOP Classes in* Table ‎1‑14*. For the "Transfer Syntax Set" column use Transfer Syntax Sets defined in* Table ‎1‑2*.]*

Table ‎1‑14 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* |  |  |
| *Rendition Selection Document Real-Time Communication* | *1.2.840.10008.10.4* | *N/A* |  |  |

## De-identification Profiles

Table ‎1‑15 lists all supported de-identification profiles and options.

*[Complete* Table ‎1‑15 *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 ‎1‑15 De-Identification Profiles

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

## Specific Character Sets

*[List all supported Character Sets and the IANA name as well as a description in* Table ‎1‑16*.]*

Table ‎1‑16 Supported Specific Character Sets

| **Defined Term** | **IANA** | **Description** |
| --- | --- | --- |
| Single-Byte Character Sets without Code Extensions | | |
| ISO\_IR 6 | ISO-646 or US-ASCII | Default Repertoire |
| *ISO\_IR 100* | *ISO-8859-1* | *Latin Alphabet No.1 (West Europe)* |
|  |  |  |
| Single-Byte Character Sets with Code Extension | | |
| *ISO 2022 IR 6* |  | *Default Repertoire* |
| *ISO 2022 IR 100* |  | *Latin Alphabet No. 1 (West Europe)* |
|  |  |  |
| Multi-Byte Character Sets without Code Extensions | | |
| *ISO\_IR 192* | *UTF-8* | *Unicode in UTF-8 Level 3* |
| *GB18030* | *GB18030* | *GB18030-2000 (P.R China Norm GB18030)* |
|  |  |  |
| Multi-Byte Character Sets with Code Extensions | | |
| *ISO 2022 IR 87* | *ISO-2022-JP* | *Japanese JIS X 0208* |
| *ISO 2022 IR 149* | *ISO-2022-KR* | *Korean* |

# Table of Contents

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

# Introduction

## 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** |
| --- | --- | --- | --- |
| *<Revision>* | *<Date>* | *<Product Version(s)>* | *<Change>* |

## 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 ‎4 Implementation Model.

• Personnel involved in Sales can use the information in Section ‎1 to assess the compatibility between different systems involved in a sales situation.

• System Integrators can use information in Section ‎6 during system installation and also information from Section ‎5 Service and Interoperability Description for details regarding the implemented services.

• Field Service Engineers can use the details from Section ‎5 Service and Interoperability Description and from Section ‎7 Network and Media Communication Details for troubleshooting.

• Hospital IT staff focusing on security can use the details provided in Section ‎8 Security regarding implemented Security features.

• Research Personnel may be interested in using information provided in Annex ‎A Information Object Definitions (IODs) or Annex ‎B Structured Report Content Encoding to get detailed imaging and measurement information.

## 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.*

## 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](part06.html#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](part06.html#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* |

## 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 |

## 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] National Electrical Manufacturers Association (NEMA), Rosslyn, VA USA. *PS3 / ISO 12052 Digital Imaging and Communications in Medicine (DICOM) Standard*. [http://www.dicomstandard.org](http://www.dicomstandard.org/) .

[2] Integrating the Healthcare Enterprise (IHE). *IHE Radiology Technical Framework*. <http://www.ihe.net/Resources/technical_frameworks/#radiology> .

# 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).]*

## Application Entities and Data Flow

The network and media interchange application model for the < *Product*> is shown in Figure ‎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.]*

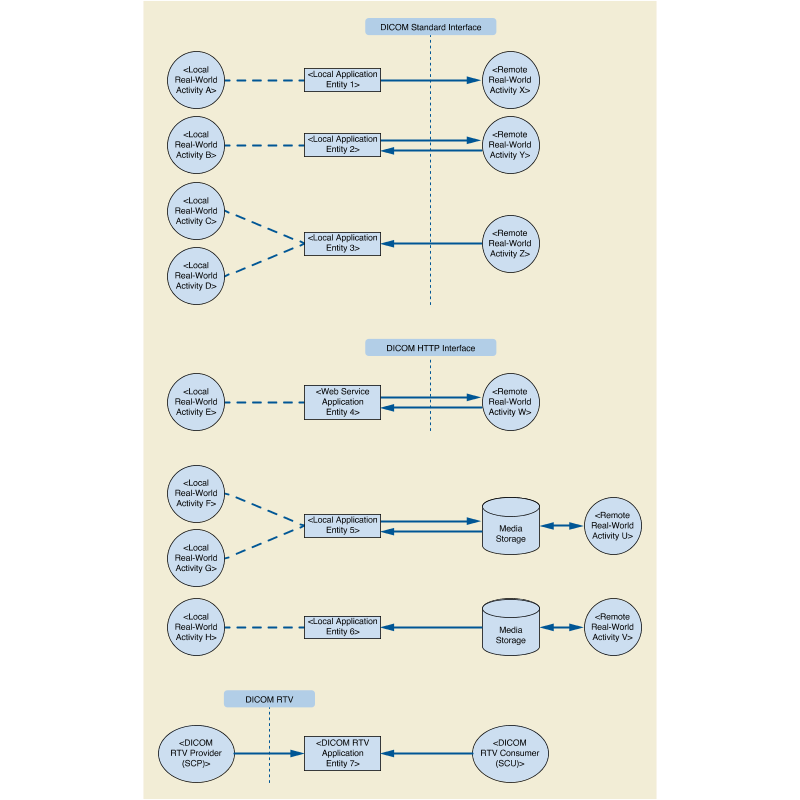


Figure ‎4‑1 <Product> Application Data Flow Diagram

*[For each AE listed in* [Figure ‎4‑1](#figure_N_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 ‎6 for details about the configurability of Services into AEs.

### 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.]*

# Service and Interoperability Description

## Mapping of Services to Application Entities

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

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

Table ‎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]*.*

*]*

## 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.]*

### Basic Worklist Management Service

#### 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 ‎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 ‎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 ‎5‑2 Supported C-FIND Query Parameters for Modality Worklist - SCU

| **Attribute Name** | **Tag** | **Matching Type** | **Query Value Source** | **Value** | **Display on UI** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- |
| **Scheduled Procedure Step** | | | | | | |
| Scheduled 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 StepStart date | (0040,0002) | *RANGE* | *GENERATED* |  | *D* | *Current date and time minus 1 hour plus 24 hours ahead* |
| >Scheduled Procedure StepStart 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 PerformingPhysician'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** | | | | | | |
| *…* |  |  |  |  |  |  |
| **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), e.g.:*

*When configured for Japanese character set support, Person Name query attributes may contain ideographic (kanji) and/or phonetic (hiragana and katakana) and/or Romanized (romaji) representations.*

*When configured for Chinese character set support, Person Name query attributes may contain ideographic (hanzi) and/or phonetic (pinyin) representations are supported. For Patient’s Name (0010,0010), the representation which is displayed by default in the worklist is configurable.*

*When configured for Korean character set support, Person Name query attributes may contain ideographic (hanja) and/or phonetic (hangul) and/or Romanized representations.*

*If the product receives from the SCP a C-FIND response containing unsupported values in Specific Character Set (0008,0005), characters in that character set will be treated as unknown characters as described in* [*Section 6.1.2.3 in PS3.5*](part05.html#sect_6.1.2.3)*.*

*If a Person Name attribute contains multiple representations, the GUI will display one representation based on a configurable order of preference.]*

#### 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 ‎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 ‎5‑3 *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 ‎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 StepStart Date | (0040, 0002) | *RANGE* |  |
| >Scheduled Procedure StepStart Time | (0040, 0003) | *RANGE* |  |
| >Modality | (0008,0060) | *SINGLE\_VALUE* |  |
| >Scheduled PerformingPhysician'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), e.g.:*

*If the product receives from the SCU a Request Identifier containing unsupported values in the Specific Character Set (0008,0005), then no matching is performed and an error will be returned indicating the SCP is unable to process the request.]*

### Modality Performed Procedure Step Service

#### 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 ‎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.]*

Table ‎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* |  |  |
| 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.]*

#### 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* Table ‎5‑5 *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 ‎5‑5 lists the message content that is required.

Table ‎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** | | | | |
| Performed Procedure Step ID | (0040,0253) |  |  |  |
| *Performed Procedure Step Discontinuation Reason Code Sequence* | *(0040,0281)* |  |  |  |
| … |  |  |  |  |
| **Image Acquisition Results** | | | | |
| Modality | (0008,0060) |  |  |  |
| Study ID | (0020,0010) |  |  |  |
| 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.]*

### 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".]*

### Instance Availability Notification Service

#### 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 ‎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.

*[*Table ‎5‑6 *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 ‎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* |  |  |
| >>… |  |  |  |  |
| >>Instance Availability | (0008,0056) | *GENERATED* | *See* Table ‎5‑7 |  |
| >>Retrieve AE Title | (0008,0054) | *CONFIGURATION* |  |  |
| … |  |  |  |  |

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

*[Fill in* Table ‎5‑7 *with Values supported for the Instance Availability Attribute and define the meaning of these Values in the context of your <Product>]*

Table ‎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.]*

#### 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 ‎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 ‎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.]*

### Storage Service

#### 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 ‎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, 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.]*

##### 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 ‎5‑9 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 ‎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 ‎5‑9 Transcoding of Transfer Syntaxes

| **Stored Transfer Syntax** | **Sent 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 Prediction (Process 14)** | *SUPPORTED* | *SUPPORTED* |  | *NEW\_UID* |  |
| **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)

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

#### 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 ‎1.1 Content and Transfer in the Section ‎1 for the list of supported SOP Classes.

Table ‎5‑10 defines the conformance levels of *<Product>*.

Table ‎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 ‎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 ‎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.1.1*.]*

Table ‎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 ‎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 ‎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)* | *MyCompanyPrivateCreator* | *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 ‎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 ‎5‑13 *for details. The Table shows some examples which can be reused, modified, deleted, or extended based on your product implementation]*

Table ‎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 ‎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 ‎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 PS3.4 Section B.4.3.2.]*

### Storage Commitment Service

#### 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 ‎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 ‎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 ‎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 ‎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.]*

#### 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 ‎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 ‎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.]*

### 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.]*

#### 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 ‎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* Table ‎5‑17 *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 ‎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, GENERATED* |  | *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** | | | | | | |
| *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), e.g.:*

*When configured for Japanese character set support, Person Name query attributes may contain ideographic (kanji) and/or phonetic (hiragana and katakana) and/or Romanized (romaji) representations.*

*When configured for Chinese character set support, Person Name query attributes may contain ideographic (hanzi) and/or phonetic (pinyin) representations are supported. For Patient’s Name (0010,0010), the representation which is displayed by default in the worklist is configurable.*

*When configured for Korean character set support, Person Name query attributes may contain ideographic (hanja) and/or phonetic (hangul) and/or Romanized representations.*

*If the product receives from the SCP a C-FIND response containing unsupported values in Specific Character Set (0008,0005), characters in that character set will be treated as unknown characters as described in* [*Section 6.1.2.3 in PS3.5*](part05.html#sect_6.1.2.3)*.*

*If a Person Name attribute contains multiple representations, the GUI will display one representation based on a configurable order of preference.]*

#### 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 ‎5.2.7.1*.]*

#### 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.]*

#### 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 ‎5.2.7.3*.]*

#### 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 ‎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).

*[*Table ‎5‑18 *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 ‎5‑18 Supported C-FIND Attribute Matching for Study Root Q/R Model - SCP

| **Attribute Name** | **Tag** | **MatchingType** | **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), e.g.:*

*If the product receives from the SCU a Request Identifier containing unsupported values in the Specific Character Set (0008,0005), then no matching is performed and an error will be returned indicating the SCP is unable to process the request.]*

*[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.]*

#### 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 ‎5.2.7.5*.]*

#### 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 ‎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.]*

#### 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 ‎5.2.7.7*.]*

### Print Management Service

#### 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 ‎5‑19.

Table ‎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 |

##### Basic Film Session SOP Class

Table ‎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 ‎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 ‎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 ‎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*  *…>>* |  |
| *Film Destination* | *(2000,0040)* | *<<MAGAZINE*  *PROCESSOR*  *BIN\_I*  *…>>* | *PROCESSOR* |
| *Film Session Label* | *(2000,0050)* |  |  |
| *Memory Allocation* | *(2000,0060)* |  |  |
| *Owner ID* | *(2100,0160)* |  |  |

##### Basic Film Box SOP Class

Table ‎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 ‎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 ‎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 ‎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*  *…>>* |  |
| *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* |
| Referenced Film Session Sequence | (2010,0500) | *<possible Values or range>* |  |
| >Referenced SOP Class UID | (0008,1150) | 1.2.840.10008.5.1.1.1 |  |
| >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)* |  |  |

##### Basic Grayscale Image Box SOP Class

Table ‎5‑24 lists the supported DIMSE Service for the Basic Grayscale Image Box SOP Class:

Table ‎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 ‎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 ‎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) |  |  |
| *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)* |  |  |

##### Printer SOP Class

Table ‎5‑26 lists the supported DIMSE Services for the Printer SOP Class:

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

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

Table ‎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 ‎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 ‎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)* |  |

#### 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 ‎5‑29:

Table ‎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 |

##### 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* Section ‎5.2.8.1.1 Basic Film Session SOP Class *for Basic Grayscale Print Management Meta SOP Class. Otherwise, copy the Film Session table here and fill in the proper Values.]*

##### 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* Section ‎5.2.8.1.2 Basic Film Box SOP Class *for Basic Grayscale Print Management Meta SOP Class. Otherwise copy the Film Box table here and fill in the proper Values.]*

##### Basic Color Image Box SOP Class

Table ‎5‑30 lists the supported DIMSE Service for the Basic Color Image Box SOP Class:

Table ‎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 ‎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 ‎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) |  |  |

##### 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 ‎5.2.8.1.4*. Otherwise copy the Printer SOP Class table here and fill in the proper Values.]*

#### SCU of the Basic Annotation Box SOP Class

Table ‎5‑32 lists the supported DIMSE Service for the Basic Annotation Box SOP Class:

Table ‎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 ‎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 ‎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* |  |

#### SCU of the Print Job SOP Class

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

Table ‎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 ‎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 ‎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)* |  |

#### SCU of the Presentation LUT SOP Class

Table ‎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 ‎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 ‎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 ‎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>>* |  |

#### SCU of the Printer Configuration Retrieval SOP Class

Table ‎5‑39 lists the supported DIMSE for the Printer Configuration Retrieval SOP Class:

Table ‎5‑39 Services for the Printer Configuration Retrieval SOP Class - SCU

| **DIMSE Service Element** | **Purpose** |
| --- | --- |
| N-GET | Retrieve printer configuration. |

#### 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 ‎5‑40:

Table ‎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 |

##### Basic Film Session SOP Class

Table ‎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 ‎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 ‎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 ‎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.]*

##### Basic Film Box SOP Class

Table ‎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 ‎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 ‎5‑44 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 ‎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>* | *20* |
| 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) |  |  |
| *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).]*

##### Basic Grayscale Image Box SOP Class

Table ‎5‑45 lists the supported DIMSE Service for the Basic Grayscale Image Box SOP Class:

Table ‎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 ‎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 ‎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>>* |  |
| 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.]*

##### Printer SOP Class

Table ‎5‑47 lists the supported DIMSE Services for the Printer SOP Class:

Table ‎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 ‎5‑48](#table_N_5_48) lists the Printer SOP Class N-EVENT-REPORT Behavior:

Table ‎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 ‎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 ‎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)* |  |

#### 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 ‎5‑50:

Table ‎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 |

##### 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 ‎5.2.8.7.1*. Otherwise copy the Film session table here and fill in the proper Values.]*

##### 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 ‎5.2.8.7.2*. Otherwise copy the Film Box Table here and fill in the proper Values.]*

##### Basic Color Image Box SOP Class

Table ‎5‑51 lists the supported DIMSE Service for the Basic Color Image Box SOP Class:

Table ‎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 ‎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 ‎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.]*

##### 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 ‎5.2.8.7.4*. Otherwise copy the Printer SOP Class Table here and fill in the proper Values.]*

#### SCP of the Basic Annotation Box SOP Class

Table ‎5‑53 lists the supported DIMSE Service for the Basic Annotation Box SOP Class:

Table ‎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 ‎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 ‎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* |  |

#### SCP of the Print Job SOP Class

Table ‎5‑55 lists the supported DIMSE Services for the Print Job SOP Class:

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

Table ‎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 ‎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 ‎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)* |  |

#### SCP of the Presentation LUT SOP Class

Table ‎5‑58 lists the supported DIMSE Services for the Presentation LUT SOP Class:

Table ‎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 ‎5‑59 lists the supported N-CREATE Attributes for Presentation LUT:

*[List the supported Attributes in* Table ‎5‑59*.]*

Table ‎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>>* |  |

#### SCP of the Printer Configuration Retrieval SOP Class

Table ‎5‑60 lists the supported DIMSE Services for the Printer Configuration Retrieval SOP Class:

Table ‎5‑60 Services for the Printer Configuration Retrieval SOP Class

| **DIMSE Service Element** | **Purpose** |
| --- | --- |
| N-GET | Retrieve printer configuration. |

## DICOM Web Services

### URI Web Service (WADO URI)

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

#### Supported Web Media Types

##### 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 ‎5.2.5.2 *if the same requirements apply, or by copying the tables from* Section ‎5.2.5.2 *and filling them appropriately, if the requirements for Web Services differ.]*

##### Rendered Media Types

Table ‎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 ‎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* |  |  |
| *image/jph* |  |  |
| *Multi-Frame Image* | *image/gif* |  |  |
| *Video* | *video/mpeg* |  |  |
| *video/mp4* |  |  |
| *video/H265* |  |  |
| Text | text/html |  |  |
| text/plain |  |  |
| *text/xml* |  |  |
| *text/rtf* |  |  |
| *application/pdf* |  |  |

#### 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 ‎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.]*

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

##### User Agent

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

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

Table ‎5‑62 Query Parameters for Retrieve DICOM 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* | application/dicom | *[Must be compatible with the acceptable Media Types in the HTTP Header]*  See in the Overview section Table ‎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 ‎5‑63:

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

Table ‎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 ‎1‑1 the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "UA" column |
| *Accept-charset* | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |

##### 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 ‎5‑64 and Table ‎5‑65).

The URI is composed by a Base URI: see Section ‎6.3.1 for the Base URI of the Origin Server.

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

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

Table ‎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 ‎1‑1 the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "OS" column |
| charset | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |
| *anonymize* |  |  |
| *transferSyntax* |  |  |

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

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

Table ‎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 ‎1‑1 the supported DICOM SOP Classes / Transfer Syntaxes. Look for "Y" in the "OS" column |
| Accept-charset | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |

#### 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 ‎5.2.5.2.

##### User Agent

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

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

Table ‎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 ‎5.3.1.1.2 for details |
| *charset* | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |
| *annotation* |  |  |
| *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 user agent supports Header Fields listed in Table ‎5‑67.

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

Table ‎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 ‎5.3.1.1.2 for details |
| *Accept-charset* | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |

##### 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 ‎5‑68 and Table ‎5‑69).

The URI is composed by a Base URI: see Section ‎6.3.1 for the Base URI of the origin server.

The URI Web Service origin server supports Query Parameters listed in Table ‎5‑68.

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

Table ‎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 ‎5.3.1.1.2 |
| charset | *<<UTF-8*  *ISO-8859-1*  *…>>* |  |
| *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 ‎5‑69.

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

Table ‎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 ‎5.3.1.1.2 Rendered Media Types |

### Studies Web Service

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

#### Supported Web Media Types

##### 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 ‎5.2.5.2 *if the same requirements apply, or by copying the tables from* Section ‎5.2.5.2 *and filling them appropriately, if requirements for Web Services differ.]*

##### 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 ‎5‑70 lists the supported Media Types and Transfer Syntax UIDs for Compressed Bulkdata.

Table ‎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* |  |  |
| image/jphc | 1.2.840.10008.1.2.4.201 | High-Throughput JPEG 2000 Image Compression (Lossless Only) |  |  |
| *1.2.840.10008.1.2.4.202* | *High-Throughput JPEG 2000 with RPCL Options Image Compression (Lossless Only)* |  |  |
| *1.2.840.10008.1.2.4.203* | *High-Throughput JPEG 2000 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* |  |  |
| image/jphc | 1.2.840.10008.1.2.4.201 | High-Throughput JPEG 2000 Image Compression (Lossless Only) |  |  |
| *1.2.840.10008.1.2.4.202* | *High-Throughput JPEG 2000 with RPCL Options Image Compression (Lossless Only)* |  |  |
| *1.2.840.10008.1.2.4.203* | *High-Throughput JPEG 2000 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* |  |  |

##### Supported Rendered Media Types

Table ‎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 ‎5‑71 Rendered Media Types

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

#### Retrieve supported transaction (WADO-RS)

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

##### User Agent

The Retrieve Transaction user agent can request resources listed in Table ‎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 ‎5‑72 Resources Retrieve Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
| *DICOM Instance Resources - See Resources path in* [*Table 10.4.1-1 in PS3.18*](part18.html#table_10.4.1-1) | |
| *Study Instances* |  |
| *Series Instances* |  |
| *Individual Instance* |  |
| *DICOM Metadata Resources - See Resources path in* [*Table 10.4.1-2 in PS3.18*](part18.html#table_10.4.1-2) | |
| *Study Metadata* |  |
| *Series Metadata* |  |
| *Instance Metadata* |  |
| *DICOM Bulkdata Resources - See Resources path in* [*Table 10.4.1.5-1 in PS3.18*](part18.html#table_10.4.1.5-1) | |
| *Study Bulkdata* |  |
| *Series Bulkdata* |  |
| *Instance Bulkdata* |  |
| *Bulkdata* |  |
| *DICOM Pixel Data Resources - See Resources path in* [*Table 10.4.1.6-1 in PS3.18*](part18.html#table_10.4.1.6-1) | |
| *Study Pixel Data* |  |
| *Series Pixel Data* |  |
| *Instance Pixel Data* |  |
| *Frame Pixel data* |  |
| *Rendered Resources - See Resources path in* [*Table 10.4.1-3 in PS3.18*](part18.html#table_10.4.1-3) | |
| *rendered study* |  |
| *rendered series* |  |
| *rendered instance* |  |
| *rendered frame* |  |
| *rendered bulk* |  |
| *Thumbnail Resources - See Resources path in* [*Table 10.4.1-4 in PS3.18*](part18.html#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 ‎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* [*Section 8.3.5 in PS3.18*](part18.html#sect_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 ‎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 ‎5‑74.

*[List the supported Header Fields and their supported Values. Fill in information on your implementation in the "Comments" column when necessary. See* [*Section 10.4.4 in PS3.18*](part18.html#sect_10.4.4) *for the list of resources and their corresponding Media Types.]*

Table ‎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 ‎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 and 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/jphc*  *image/jpx*  *video/mpeg2*  *video/mp4>*> | See details in Section ‎5.3.2.1.2. |
| **Rendered Resource** | | |
| Accept | <<image/jpeg  image/gif  image/png  *image/jp2*  *image/jph*  *image/gif*  *video/mpeg*  *video/mp4*  *video/H265*  text/html  text/plain  *text/xml*>> | See details in Section ‎5.3.2.1.3. |
| **Thumbnail Resource** | | |
| Accept | <<image/jpeg  image/gif  image/png  *image/jp2*  *image/jph*  *image/gif*  *video/mpeg*  *video/mp4*  *video/H265*  text/html  text/plain  *text/xml*>> | See details in Section ‎5.3.2.1.3. |
| **All Resources** | | |
| *Accept-charset* | <<UTF-8  ISO-8859-1  …>> |  |

##### 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 ‎6.3.2.1 for the Base URI of the origin server

The Retrieve Transaction origin server supports resources listed in Table ‎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 ‎5‑75 Resources Retrieve Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
| *DICOM Instance Resources - See Resources path in* [*Table 10.4.1-1 in PS3.18*](part18.html#table_10.4.1-1) | |
| *Study Instances* |  |
| *Series Instances* |  |
| *Individual Instance* |  |
| *DICOM Metadata Resources - See Resources path in* [*Table 10.4.1-2 in PS3.18*](part18.html#table_10.4.1-2) | |
| *Study Metadata* |  |
| *Series Metadata* |  |
| *Instance Metadata* |  |
| *DICOM Bulkdata Resources - See Resources path in* [*Table 10.4.1.5-1 in PS3.18*](part18.html#table_10.4.1.5-1) | |
| *Study Bulkdata* |  |
| *Series Bulkdata* |  |
| *Instance Bulkdata* |  |
| *Bulkdata* |  |
| *DICOM Pixel Data Resources - See Resources path in* [*Table 10.4.1.6-1 in PS3.18*](part18.html#table_10.4.1.6-1) | |
| *Study Pixel Data* |  |
| *Series Pixel Data* |  |
| *Instance Pixel Data* |  |
| *Frame Pixel data* |  |
| *Rendered Resources - See Resources path in* [*Table 10.4.1-3 in PS3.18*](part18.html#table_10.4.1-3) | |
| *rendered study* |  |
| *rendered series* |  |
| *rendered instance* |  |
| *rendered frame* |  |
| *rendered bulk* |  |
| *Thumbnail Resources - See Resources path in* [*Table 10.4.1-4 in PS3.18*](part18.html#table_10.4.1-4) | |
| *Study Thumbnail* |  |
| *Series Thumbnail* |  |
| *Instance Thumbnail* |  |
| *Frame Thumbnail* |  |

Table ‎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* [*Section 8.3.5 in PS3.18*](part18.html#sect_8.3.5) *for the list of Rendering Query Parameters.]*

Table ‎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 ‎5‑77.

*[List the supported Header Field and their supported Values. Fill in information on your implementation in the "Comments" column when necessary. See* [*Section 10.4.4 in PS3.18*](part18.html#sect_10.4.4) *for the list of resources and their corresponding Media Types.]*

Table ‎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 ‎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 and 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/jphc*  *image/jpx*  *video/mpeg2*  *video/mp4>*> | See details in Section ‎5.3.2.1.2. |
| **Rendered Resource** | | |
| Accept | <<image/jpeg  image/gif  image/png  *image/jp2*  *image/jph*  *image/gif*  *video/mpeg*  *video/mp4*  *video/H265*  text/html  text/plain  *text/xml*>> | See details in Section ‎5.3.2.1.3. |
| **Thumbnail Resource** | | |
| Accept | <<image/jpeg  image/gif  image/png  *image/jp2*  *image/jph*  *image/gif*  *video/mpeg*  *video/mp4*  *video/H265*  text/html  text/plain  *text/xml*>> | See details in Section ‎5.3.2.1.3. |
| **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*  *…>>* |

#### Store Transaction (STOW-RS)

##### User Agent

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

The Store Transaction user agent can request resources listed in Table ‎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 ‎5‑78 Resources Store Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 10.5.1-1 in PS3.18](part18.html#table_10.5.1-1) |
| *All Studies* |  |
| *Study* |  |

The Store Transaction user agent supports Header Fields listed in Table ‎5‑79.

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

Table ‎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 ‎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/jphc*  *image/jpx*  *video/mpeg2*  *video/mp4>>* | See details in Section ‎5.3.2.1.2. |
| Content-Length |  | *[If Content-Encoding is not present]* |
| Content-Encoding |  | *[If Content-Length is not present]* |

##### 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 ‎6.3.2.2.

The Store Transaction origin server can request resources listed in Table ‎5‑80.

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

Table ‎5‑80 Resources Store Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 10.5.1-1 in PS3.18](part18.html#table_10.5.1-1) |
| All Studies |  |
| Study |  |

The Store Transaction origin server supports Header Fields listed in Table ‎5‑81.

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

Table ‎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 ‎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*  *image/x-jls*  *image/jp2*  *image/jpx*  *image/jphc*  *video/mpeg2*  *video/mp4>>* | See details in Section ‎5.3.2.1.2. |
| Content-Length |  | *[If Content-Encoding is not present.]* |
| Content-Encoding |  | *[If Content-Length is not present.]* |

#### Search Transaction (QIDO-RS)

##### User Agent

The Search Transaction user agent can request resources listed in Table ‎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 ‎5‑82 Resources Search Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 10.6.1-1 in PS3.18](part18.html#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 ‎5‑83.

*[Indicate the supported parameters and their supported Values. For detail on the implementation possibilities see* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in specific details of your implementation if available in the "Comments" column.]*

Table ‎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 ‎5‑84 |  |
| *includefield* | Attributes to be included in the response (return key). See the supported DICOM Attributes in the Table ‎5‑84 |  |
| *fuzzymatching* | <<true  false>> |  |
| *emptyvaluematching* | <<true  false>> |  |
| *multiplevaluematching* | <<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 ‎5‑17 *and remove the text and table below. Otherwise provide the following text and* Table ‎5‑84*.]*

Table ‎5‑84 lists the DICOM query Attributes supported by the Search Transaction user agent.

Table ‎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 ‎5‑85.

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

Table ‎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 ‎5.7 for supported Values |  |

##### 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 ‎5‑86.

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

Table ‎5‑86 Resources Search Transaction - Origin Server

| **Transaction** | **Resource** | **Comments** |
| --- | --- | --- |
|  |  | See resource path in [Table 10.6.1-1 in PS3.18](part18.html#table_10.6.1-1) |
| Search | All Studies |  |
| All Series |  |
| All Instances |  |
| Study's Series |  |
| Study's Instances |  |
| Study Series' Instances |  |

The Search Transaction origin server supports query parameters listed in Table ‎5‑87.

*[List the supported parameters and their supported Values. For detail on the implementation possibilities see* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎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 ‎5‑89 |  |
| includefield | Attributes to be included in the response (return key). See the supported DICOM Attributes provided in the response in the Table ‎5‑89 |  |
| fuzzymatching | <<true  false>> |  |
| limit |  |  |
| offset | Number of results the server skips before the first returned result |  |

The Search Transaction origin server supports Header Fields listed in Table ‎5‑88.

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

Table ‎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 ‎5‑18 *and remove the text and table below. Otherwise provide the following text and* Table ‎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 ‎5‑89 lists the DICOM query / returned Attributes supported by the Search Transaction origin server.

Table ‎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) |  |  |  |
| … |  |  |  |  |
| **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* |
| … |  |  |  |  |

### Worklist Web Service

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

#### Create Transaction Worklist Web Service

##### User Agent

The Worklist Web Service user agent can request resources listed in Table ‎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 ‎5‑90 Resources for the Worklist Web Service Create Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.4.1.1 in PS3.18](part18.html#sect_11.4.1.1) |
| *Worklist* |  |
| *Workitems* |  |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑91 Query Parameters for Worklist Web Service Create Workitem- User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.4.1-3 in PS3.18*](part18.html#table_11.4.1-3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑92 Header Fields for Worklist Web Service Create Workitem Worklist Web Service - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎5‑93 for the Create Transaction:

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

Table ‎5‑93 Resources for the Worklist Web ServiceCreate Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.4.1.1 in PS3.18](part18.html#sect_11.4.1.1) |
| Worklist |  |
| Workitems |  |

Table ‎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* [*Table 11.4.1-3 in PS3.18*](part18.html#table_11.4.1-3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑94 Query Parameters for Worklist Web Service Create Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.4.1-3 in PS3.18*](part18.html#table_11.4.1-3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑95 Header Fields for Worklist Web Service Create Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Retrieve Transaction Worklist Web Service

##### User Agent

The Retrieve Workitem Transaction user agent can request resources listed in Table ‎5‑96.

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

Table ‎5‑96 Resources for Worklist Web Service Retrieve Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.5.1 in PS3.18](part18.html#sect_11.5.1) |
| Workitem | */workitems/{workitem}* |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑97 Query Parameters for Worklist Web Service Retrieve Workitem Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.5.1-1 in PS3.18*](part18.html#table_11.5.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑98 Header Fields for Worklist Web Service Retrieve Workitem- User Agent

| **Header Field** | **Supported Values** |  |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Retrieve Workitem Transaction origin server can request Resources listed in Table ‎5‑99.

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

Table ‎5‑99 Resources for Worklist Web Service Retrieve Transaction- Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.5.1 in PS3.18](part18.html#sect_11.5.1) |
| Workitem |  |

Table ‎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 ‎5‑100 Query Parameters for Worklist Web Service Retrieve Workitem - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.5.1-1 in PS3.18*](part18.html#table_11.5.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑101 Header Fields for Worklist Web Service Retrieve Workitem - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Update Transaction Worklist Web Service

##### User Agent

The Update Workitem Transaction user agent can request resources listed in Table ‎5‑102.

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

Table ‎5‑102 Resources for Worklist Web Service Update Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.6.1 in PS3.18](part18.html#sect_11.6.1). |
| Workitem |  |

Table ‎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* [*Section 11.6.1.2 in PS3.18*](part18.html#sect_11.6.1.2)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑103 Query Parameters for Worklist Web Service Update Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 11.6.1.3 in PS3.18*](part18.html#sect_11.6.1.3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑104 Header Fields for Worklist Web Service Update Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Update Workitem Transaction origin server can request resources listed in Table ‎5‑105.

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

Table ‎5‑105 Resources for t Worklist Web Service Update Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.6.1 in PS3.18](part18.html#sect_11.6.1) |
| Workitem |  |

Table ‎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* [*Section 11.6.1.2 in PS3.18*](part18.html#sect_11.6.1.2)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑106 Query Parameters for Worklist Web Service Update Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 11.6.1.3 in PS3.18*](part18.html#sect_11.6.1.3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑107 Header Fields for Worklist Web Service Update Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Change State Transaction Worklist Web Service

##### User Agent

The Change State Transaction user agent can request resources listed in Table ‎5‑108.

Table ‎5‑108 Resources for Worklist Web Service Change State - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.1.1-1 in PS3.18](part18.html#table_11.1.1-1). |
| Workitem State | /workitems/{workitem}/state |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑109 Query Parameters for Worklist Web Service Change State- User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.7.1-1 in PS3.18*](part18.html#table_11.7.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑110 Header Fields for Worklist Web Service Change State - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎5‑111 for the Change State Transaction

Table ‎5‑111 Resources for Worklist Web Service Change State - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.1.1-1 in PS3.18](part18.html#table_11.1.1-1). |
| Workitem State | /workitems/{workitem}/state |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑112 Query Parameters for Worklist Web Service Change State Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.7.1-1 in PS3.18*](part18.html#table_11.7.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑113 Header Fields for Worklist Web Service Change State Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Request Cancellation Transaction Worklist Web Service

##### 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 ‎5‑114.

Table ‎5‑114 Resources for the Worklist Web Service Request Cancellation Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.8.1 in PS3.18](part18.html#sect_11.8.1). |
| Workitem Request Cancellation | /workitems/{workitem}/cancelrequest |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑115 Query Parameters for Worklist Web Service Request Cancellation - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.8.1-1 in PS3.18*](part18.html#table_11.8.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑116 Header Fields for Worklist Web Service Request Cancellation - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

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

Table ‎5‑117 Resources for the Worklist Web Service Request Cancellation - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.8.1 in PS3.18](part18.html#sect_11.8.1). |
| Workitem Request Cancellation | /workitems/{workitem}/cancelrequest |

Table ‎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* [*Table 11.1.2-1 in PS3.18*](part18.html#table_11.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑118 Query Parameters for Worklist Web Service Request Cancellation Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.8.1-1 in PS3.18*](part18.html#table_11.8.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑119 Header Fields for Worklist Web Service Request Cancellation Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Search Transaction Worklist Web Service

##### User Agent

The Search Transaction user agent can request resources listed in Table ‎5‑120.

Table ‎5‑120 Resources for Worklist Web Service Search Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.9.1 in PS3.18](part18.html#sect_11.9.1). |
| Workitem | /workitems |

Table ‎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* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑121 Query Parameters for Worklist Web Service Search Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.9.1-1 in PS3.18*](part18.html#table_11.9.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑122 Header Fields for Worklist Web Service Search Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎5‑123 for the Search Transaction.

Table ‎5‑123 Resources for Worklist Web Service Search Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Section 11.9.1 in PS3.18](part18.html#sect_11.9.1). |
| Workitem | /workitems?{&match\*}{&includefield}{&fuzzymatching}{&offset}{&limit} |

Table ‎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* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑124 Query Parameters for Worklist Web Service Search Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 11.9.1-1 in PS3.18*](part18.html#table_11.9.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑125 Header Fields for Worklist Web Service Search Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### 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.]*

##### User Agent

The Subscribe Transaction user agent can request resources listed in Table ‎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 ‎5‑126 Resources for Worklist Web Service Subscribe Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.10.1-1 in PS3.18](part18.html#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 ‎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* [*Table 11.10.1-2 in PS3.18*](part18.html#table_11.10.1-2)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑127 Query Parameters for Worklist Web Service Subscribe Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑128 Header Fields for Worklist Web Service Subscribe Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎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 ‎5‑129 Resources for Worklist Web Service Subscribe Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.10.1-1 in PS3.18](part18.html#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 ‎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* [*Table 11.10.1-2 in PS3.18*](part18.html#table_11.10.1-2)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑130 Query Parameters for Worklist Web Service Subscribe Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑131 Header Fields for Worklist Web Service Subscribe Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Unsubscribe Transaction Worklist Web Service

##### User Agent

The Unsubscribe Transaction user agent can request resources listed in Table ‎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 ‎5‑132 Resources for Worklist Web Service Unsubscribe Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.11.1-1 in PS3.18](part18.html#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 ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑133 Header Fields for Worklist Web Service Unsubscribe Transaction- User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎5‑134 for the Unsubscribe Transaction.

Table ‎5‑134 Resources for Worklist Web Service Unsubscribe Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.11.1-1 in PS3.18](part18.html#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 ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑135 Header Fields for Worklist Web Service Unsubscribe Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Suspend Global Subscription Transaction Worklist Web Service

##### User Agent

The Suspend Global Subscription Transaction user agent can request resources listed in Table ‎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 ‎5‑136 Resources for Worklist Web Service Suspend Global Subscription Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.12.1-1 in PS3.18](part18.html#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 ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑137 Header Fields for Worklist Web Service Suspend Global Subscription Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The Worklist Web Service origin server supports resources listed in Table ‎5‑138 for the Suspend Global Subscription Transaction.

Table ‎5‑138 Resources for Worklist Web Service Suspend Global Subscription Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 11.12.1-1 in PS3.18](part18.html#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 ‎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* [*Table 8.4.1-1 in PS3.18*](part18.html#table_8.4.1-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑139 Header Fields for Worklist Web Service Suspend Global Subscription Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

### 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 ‎1‑11 Non-Patient Instance Service.

#### Supported Web Media Types

The supported Non-Patient Instance Storage SOP Classes are listed in the Table ‎5‑140 below. The supported Transfer Syntaxes are listed in Section ‎1.1 of this document.

*[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 ‎5‑140 Non-Patient Instance Web Service Storage SOP Classes

| **SOP Classname** | **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 ‎5.2.5.2 *if the same requirements apply, or by copying the tables from* Section ‎5.2.5.2 *and filling them appropriately, if requirements for Web Services differ.]*

#### Retrieve Transaction

##### User Agent

The Non-Patient Instance (NPI) Retrieve transaction as user agent can request resources listed in Table ‎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 ‎5‑141 Resources for NPI Web Services Retrieve Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 12.4.1-1 in PS3.18](part18.html#table_12.4.1-1) |
| Instance | /{npi-name}/{uid} |

Table ‎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* [*Table 12.1.2-1 in PS3.18*](part18.html#table_12.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑142 Query Parameters for NPI Web Services Retrieve Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 12.4.1.3 in PS3.18*](part18.html#sect_12.4.1.3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑143 Header Fields for NPI Web Services Retrieve Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### Origin Server

The NPI Web Service origin server supports resources listed in Table ‎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 ‎5‑144 Resources for NPI Web Services Retrieve Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 12.4.1-1 in PS3.18](part18.html#table_12.4.1-1) |
| Instance | /{npi-name}/{uid} |

Table ‎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* [*Table 12.1.2-1 in PS3.18*](part18.html#table_12.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑145 Query Parameters for NPI Web Services Retrieve Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 12.4.1.3 in PS3.18*](part18.html#sect_12.4.1.3) *and* [*Section 12.4.3.2 in PS3.18*](part18.html#sect_12.4.3.2)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑146 Header Fields for NPI Web Services Retrieve Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Store Transaction

##### User Agent

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

The NPI Store Transaction user agent can request resources listed in Table ‎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 ‎5‑147 Resources for NPI Web Services Store Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 12.5.1-1 in PS3.18](part18.html#table_12.5.1-1). |
| *All Instances* | */{npi-name}* |
| *Instance* | */{npi-name} {/uid}* |

Table ‎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* [*Table 12.1.2-1 in PS3.18*](part18.html#table_12.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑148 Query Parameters for NPI Web Services Store Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 12.5.1.3 in PS3.18*](part18.html#sect_12.5.1.3)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑149 Header Fields for NPI Web Services Store Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### 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 ‎6.3.4.

The NPI Store Transaction origin server supports resources listed in Table ‎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 ‎5‑150 Resources for NPI Web Services Store Transaction - Origin Server

| **Transaction** | **Resource** | **Comments** |
| --- | --- | --- |
|  |  | See resource path in [Table 12.5.1-1 in PS3.18](part18.html#table_12.5.1-1). |
| *Store*  *(a set of instances)* | *All Instances* |  |
| *Store*  *(a single instance)* | *Instance* |  |

Table ‎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* [*Table 12.1.2-1 in PS3.18*](part18.html#table_12.1.2-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑151 Query Parameters for NPI Web Services Store Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Section 12.5.1.3 in PS3.18*](part18.html#sect_12.5.1.3) *Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑152 Header Fields for NPI Web Services Store Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

#### Search Transaction

##### User Agent

The NPI Search Transaction user agent can request resources listed in Table ‎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 ‎5‑153 Resources for NPI Web Services Search Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 12.6.1-1 in PS3.18](part18.html#table_12.6.1-1). |
| All Instances | /{npi-name} |

Table ‎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* [*Section 12.1.2 in PS3.18*](part18.html#sect_12.1.2) *and* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑154 Query Parameters for NPI Web Services Search Transaction - User Agent

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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 ‎5‑155 Supported Query Attributes for NPI Web Services Search Transaction - User Agent

| **Attribute Name** | **Tag** | **Matching Key** | **Return Key** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

Table ‎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* [*Section 12.6.1.3 in PS3.18*](part18.html#sect_12.6.1.3) *Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑156 Header Fields for NPI Web Services Search Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

##### 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 ‎6.3.4.

The Search Transaction origin server supports resources listed in Table ‎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 ‎5‑157 Resources for NPI Web Services Search Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See resource path in [Table 12.6.1-1 in PS3.18](part18.html#table_12.6.1-1). |
| All Instances | /{npi-name} |

Table ‎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* [*Section 12.1.2 in PS3.18*](part18.html#sect_12.1.2) *and* [*Table 8.3.4-1 in PS3.18*](part18.html#table_8.3.4-1)*. Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑158 Query Parameters for NPI Web Services Search Transaction - Origin Server

| **Query Parameter** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

*[List the supported Header fields and their supported Values. See possible Header fields / Values in* [*Section 12.6.1.3 in PS3.18*](part18.html#sect_12.6.1.3) *and* [*Section 12.6.3.2 in PS3.18*](part18.html#sect_12.6.3.2) *Fill in information on your implementation in the "Comments" column when necessary.]*

Table ‎5‑159 Header Fields for NPI Web Services Search Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
|  |  |  |

Table ‎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* [*Table 12.6.1-2 in PS3.18*](part18.html#table_12.6.1-2)*]*

Table ‎5‑160 Query / Return Key for NPI Web Services Search Transaction - Origin Server

| **Attribute Name** | **Tag** | **Matching Key** | **Return Key** | **Comments on the response** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |

### Notification Web Service

*[If your Web Service supports notification, describe how WebSocket connections are opened. See details in* [*Section 8.10 in PS3.18*](part18.html#sect_8.10)*]*

### Storage Commitment Web Service

This section provides details regarding the Storage Commitment Web Service. For an overview of suppported Transactions and resources see Table ‎1‑12 Storage Commitment Service

#### Request Transaction - Storage Commitment Service

##### User Agent

The Request Transaction user agent can request resources listed in Table ‎5‑161.

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

Table ‎5‑161 Resources for Request Transaction - User Agent

| **Resource** | **Comments** |
| --- | --- |
|  | See Resources path in [Table 13.1.1-1 in PS3.18](part18.html#table_13.1.1-1) |
| *Commitment-requests* |  |

The Request Transaction user agent supports Header Fields listed in Table ‎5‑162.

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

Table ‎5‑162 Header Fields for Request Transaction - User Agent

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
| Content-Type | *application* */dicom+json*  *application* */dicom+xml*  *multipart/related; type="application/dicom+json"*  *multipart/related; type="application/dicom+xml"* |  |
| Content-Length |  | *[If Content-Encoding is not present]* |
| Content-Encoding |  | *[If Content-Length is not present]* |

##### Origin Server

The Request Transaction origin server receives POST requests for storage commitment of the referenced SOP Instances.

The user agent specifies the Target Resource as part of the URI and specifies the UIDs of the SOP Instances as part of the data in the request body with an appropriate Content-Type (i.e., XML or JSON).

The URI is composed by a Base URI: see Base URI for the origin server in Section ‎6.3.5.

The Request Transaction origin server supports resources listed in Table ‎5‑163.

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

Table ‎5‑163 Resources for Request Transaction - Origin Server

| **Resource** | **Comments** |
| --- | --- |
|  | See Resources path in [Table 13.1.1-1 in PS3.18](part18.html#table_13.1.1-1) |
| *commitment-requests* |  |

The Request Transaction origin server supports Header Fields listed in Table ‎5‑164.

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

Table ‎5‑164 Header Fields for Request Transaction - Origin Server

| **Header Field** | **Supported Values** | **Comments** |
| --- | --- | --- |
| Content-Type | *application* */dicom+json*  *application* */dicom+xml*  *multipart/related; type="application/dicom+json"*  *multipart/related; type="application/dicom+xml"* |  |
| Content-Length |  | *[If Content-Encoding is not present]* |
| Content-Encoding |  | *[If Content-Length is not present]* |

#### Result Check Transaction - Storage Commitment Service

##### User Agent

The resources and header fields supported by the user agent for the Result Check Transaction are the same as for the Request Transaction; see Section ‎5.3.6.1.1.

##### Origin Server

The Result Check Transaction origin server receives GET requests to check whether there is a result for a storage commitment request.

The Base URI, resources, and header fields supported by the origin server for the Result Check Transaction are the same as for the Request Transaction; see Section ‎5.3.6.1.2.

## Media Services

### File Set Creator (FSC)

*<Product>* supports creating the Basic Directory IOD as a File Set Creator as defined in Annex ‎A.5.

For a list of supported Media Application Profiles, see Section ‎1.4 in the Overview.

For a list of supported SOP Classes, see Section ‎1.1 in the Overview.

*[Describe, how the File Set Creator is selecting the Media Application Profiles used for creating the Media.]*

### File Set Reader (FSR)

*<Product>* supports the Media Application Profiles listed in Section ‎1.4 in the Overview.

For a list of supported SOP Classes, see Section ‎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 ‎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 external media differ.]*

To display or process DICOM Instances contained on the Media, see Section ‎5.2.5.2.

### File Set Updater (FSU)

*<Product>* supports creating the Basic Directory IOD as defined in Annex ‎A.5.

For a list of supported Media Application Profiles, see Section ‎1.4 in the Overview.

For a list of supported SOP Classes, see Section ‎1.1 in the Overview.

## Real-Time Video Services

### Service Consumer

For a list of supported SOP Classes, see Section ‎1.5 in the Overview.

Table ‎5‑165 lists restrictions that apply to the RTV instances supported by the Service Consumer.

*[List the restrictions for the RTV Service Consumer in* Table ‎5‑165 *below.]*

Table ‎5‑165 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 ‎5‑166 lists the screen resolutions that are supported by the Service Consumer.

*[List all supported screen resolutions in* Table ‎5‑166 *below.]*

Table ‎5‑166 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.]*

### Service Provider

For a list of supported SOP Classes, see Section ‎1.5 in the Overview.

Table ‎5‑167 list restrictions that apply to the RTV instances supported by the Service Provider.

*[List the restrictions for the RTV Service Consumer in* Table ‎5‑167 *below.]*

Table ‎5‑167 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 ‎5‑168 list the screen resolutions that are supported by the Service Provider.

*[List all supported screen resolutions in* Table ‎5‑168 *below.]*

Table ‎5‑168 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.]*

## 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

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.]*

## Specific Character Sets

See Section ‎1.7 for supported Values for Specific Character Set (0008,0005).

Generic configuration for Specific Character Sets is covered in . Service specific configuration for Specific Character Sets is addressed in respective subsections of Section ‎6.2 or Section ‎6.3.

*Describe behaviors such as the whether your product sends value 1, e.g.,*

This product omits Value 1 of Specific Character Set (0008,0005) when multiple values are present. Per [PS3.5](part05.html#PS3.5), the empty Value 1 indicates usage of ISO 2022 IR 6.]

*[Describe the presentation of the characters to a user, i.e., capabilities, font limitations and/or substitutions of characters.]*

*[If your product supports display/editing of non-default Character Sets, fill in the following table, otherwise remove the following table and introductory text.]*

<Product> supports displaying character sets beyond the default character repertoire (ISO-IR 6) for all displayed attributes.

<Product> supports editing character sets beyond the default character repertoire (ISO-IR 6) for the attributes listed in Table ‎5‑169.

Table ‎5‑169 Specific Character Set – Supported Attributes

| **Attribute Name** | **Tag** | **VR** |
| --- | --- | --- |
| *Referring Physician's Name* | *(0008,0090)* | *PN* |
| *Study Description* | *(0008,1030)* | *LO* |
| *Series Description* | *(0008,103E)* | *LO* |
| *Operators' Name* | *(0008,1070)* | *PN* |
| *Patient's Name* | *(0010,0010)* | *PN* |
| *Other Patient Names* | *(0010,1001)* | *PN* |
| *Patient's Address* | *(0010,1040)* | *LO* |
| *Allergies* | *(0010,2110)* | *LO* |
| *Patient Comments* | *(0010,4000)* | *LT* |
| *…* | | |

*[If your product supports mapping/conversion of non-default Character Sets, fill in the table below, otherwise remove the table and the introductory text below.]*

*<Product>* supports mapping/conversion of Character Sets as listed in Table ‎5‑170.

*[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 ‎5‑170 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* | *When mapping Attribute Values from MWL to instances created* |
|  |  |  |  |  |  |  |

*[Explain your product behavior in case it encounters unsupported character sets.]*

# 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.

## General Configuration Parameters

Table ‎6‑1 lists general configuration parameters applicable across all supported DICOM Services.

Table ‎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* |  |  |  |

## 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>* |  |  |  |

*]*

### Basic Worklist Management Service Configuration

Table ‎6‑2 lists Worklist Service configuration parameters:

Table ‎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* |  |  |

### Modality Performed Procedure Step Service Configuration

Table ‎6‑3 lists Modality Performed Procedure Step Service configuration parameters:

Table ‎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* |

### Unified Worklist and Procedure Step Service Configuration

Table ‎6‑4 lists Unified Worklist and Procedure Step Service configuration parameters:

Table ‎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* |  |  |

### Instance Availability Notification Service Configuration

Table ‎6‑5 lists Instance Availability Notification Service configuration parameters:

Table ‎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* |  |  |

### Storage Service Configuration

Table ‎6‑6 lists Storage Service configuration parameters:

Table ‎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 ‎1‑2 | *Can force to accept ILE only* |
| *Supported Storage SOP Classes as SCP* | *SERVICE* | *See* Table ‎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* |

### Storage Commitment Service Configuration

Table ‎6‑7 lists Storage Commitment Service configuration parameters:

Table ‎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* |  |  |

### Query/Retrieve Service Configuration

Table ‎6‑8 lists Query/Retrieve Service configuration parameters:

Table ‎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* |  |  |

### Print Management Service Configuration

Table ‎6‑9 lists Print Management Service configuration parameters:

Table ‎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* |

## 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]*

### URI Web Service Configuration

Table ‎6‑10 lists the configuration parameters required for URI Web Service.

*[Remove the unsupported parameters from the local and remote configuration parameters.]*

Table ‎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>* |  |  |  |

### Studies Web Service Configuration

#### Retrieve Transaction (WADO-RS) Configuration

The Retrieve Transaction is also known as WADO-RS. Table ‎6‑11 lists configuration parameters for the Retrieve Transaction of the Studies Web Service:

*[Remove the unsupported parameters from the local and remote configuration parameters.]*

Table ‎6‑11 Retrieve Transaction 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>* |  |  |  |

#### Store Transaction (STOW-RS) Configuration

The Store Transaction is also known as STOW-RS. Table ‎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 ‎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>* |  |  |  |

#### Search Transaction (QIDO-RS) Configuration

The Search Transaction service is also known as QIDO-RS. Table ‎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 ‎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>:<securedport>/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>* |  |  |  |

### Worklist Web Service Configuration

The Worklist Web Service is also known as UPS-RS.

Table ‎6‑14 lists the configuration parameters for the Worklist Web Service.

*[Remove the unsupported parameters from the local and remote configuration parameters.]*

Table ‎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>:<securedport>/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>* |  |  |  |

### Non-Patient Instances (NPI) Web Service Configuration

Table ‎6‑15 lists the configuration parameters for the NPI Web Service.

[ *Remove the unsupported parameters from the local and remote configuration parameters.]*

Table ‎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>* |  |  |  |

### Storage Commitment Service Configuration

#### Request Transaction Configuration

Table ‎6‑16 lists configuration parameters for the Request Transaction of the Storage Commitment Service:

*[Remove the unsupported parameters from the local and remote configuration parameters.]*

Table ‎6‑16 Request and Result Check Transaction Parameters

| **Local Configuration Parameters - Request and Result Check Transaction** | | | |
| --- | --- | --- | --- |
| **Parameter** | **Configurable** | **Default Value** | **Comments** |
|  | *<<USER*  *SERVICE*  *FIXED>>* | *[If there is no default, leave blank]* | *[Provide comments or Values/ranges if applicable]* |
| *Commit local Origin Server URL (Base URI)* | *FIXED* | *http://<hostname>:<port>/commitment-requests* |  |
| *Port* | *SERVICE* | 8081 |  |
| *Secured Commit local Origin Server URL (Base URI)* | *SERVICE* |  |  |
| *Secured Port* | *SERVICE* |  |  |
| *Result Availability Duration* | *FIXED* | *24* | *The number of hours that the storage commitment request result is guaranteed to be retrievable from the origin server.* |
| *<Specific Storage Commitment Service parameter>* |  |  |  |
| **Remote Configuration Parameters - Request and Result Check 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]* |
| *Commit remote Origin Server URL* | *USER* |  |  |
| *Port* | *USER* |  |  |
| *Secured Commit Remote Origin Server URL* | *SERVICE* |  |  |
| *Secured Port* | *SERVICE* |  |  |
| *Result Availability Duration* | *FIXED* | *24* | *The number of hours that the storage commitment request result is guaranteed to be retrievable from the origin server.* |
| *<Specific Storage Commitment Service parameter>* |  |  |  |

#### Result Check Transaction Configuration

Table ‎6‑16 lists configuration parameters for the Result Check Transaction of the Storage Commitment Service.

## Configuration of Media Storage Service

Table ‎6‑17 lists configuration parameters for the Media Storage service.

Table ‎6‑17 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>* |  |  |  |

## Configuration of Real-Time Video Service

Table ‎6‑18 lists configuration parameters for the Real-Time Video service.

Table ‎6‑18 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>* |  |  |  |

## 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 ‎6‑19 lists configuration parameters for the Audit Trail Originator.

Table ‎6‑19 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 ‎6‑20](#table_N_6_19) lists configuration parameters for the Audit Trail Collector.

Table ‎6‑20 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* |  |
| 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>* |  |  |  |

# Network and Media Communication Details

## 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.]*

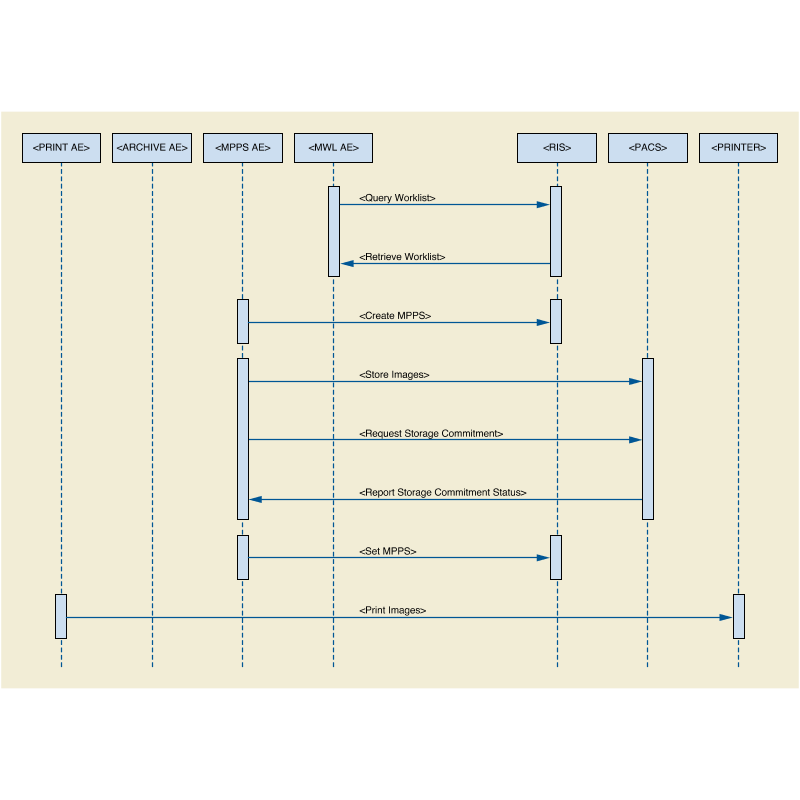


Figure ‎7‑1 Real-World Activity and Cross AE interaction

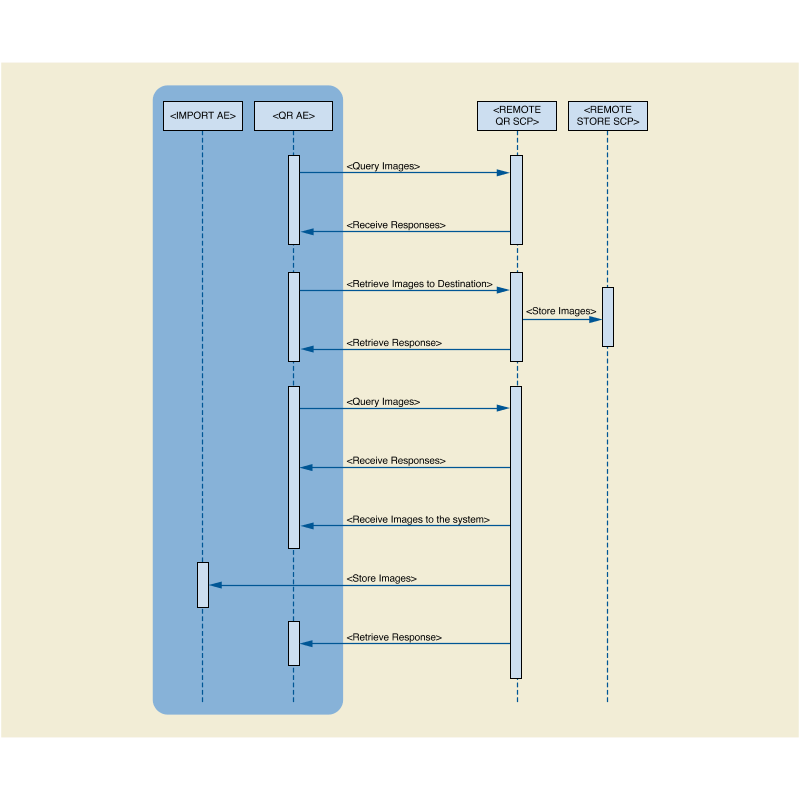


Figure ‎7‑2 Real-World Activity and Cross AE interaction - Query Retrieve

### General Association Parameters

Table ‎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 ‎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>* |

## Specifications

### *<AE1>* Application Entity

#### Sequencing of Real-World Activities for <AE1>

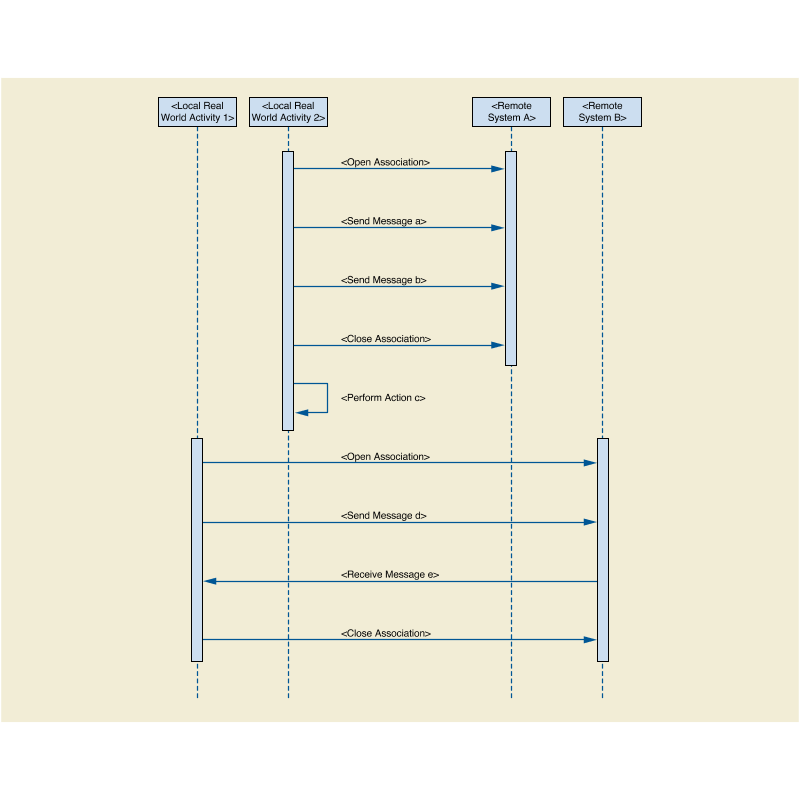


Figure ‎7‑3 Sequencing of Real-World Activities for <AE1>

*[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

*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.]*

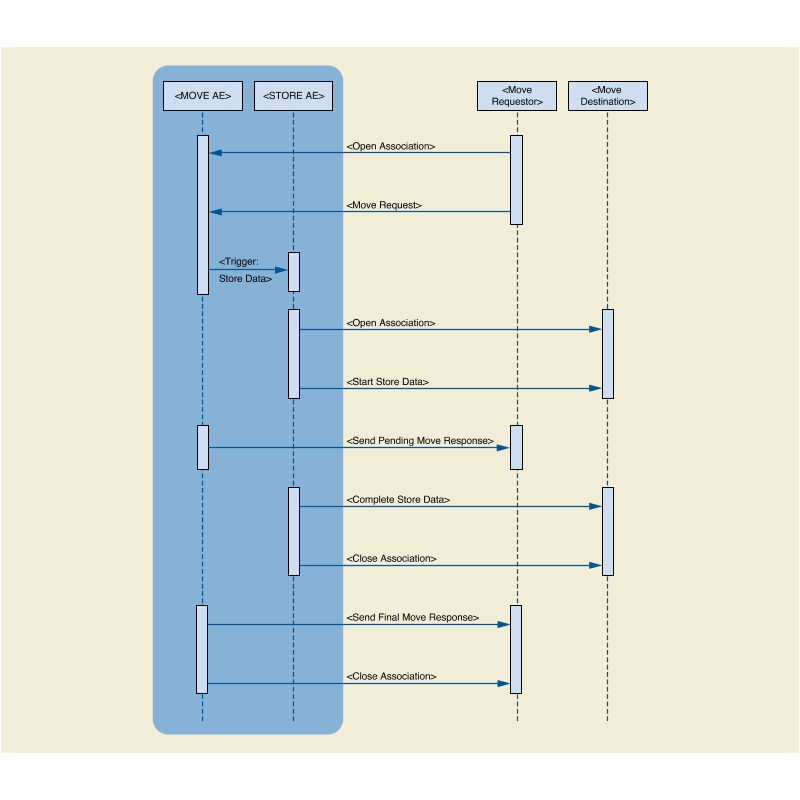


Figure ‎7‑4 Sequencing of Real-World Activities for <QueryRetrieve AE>

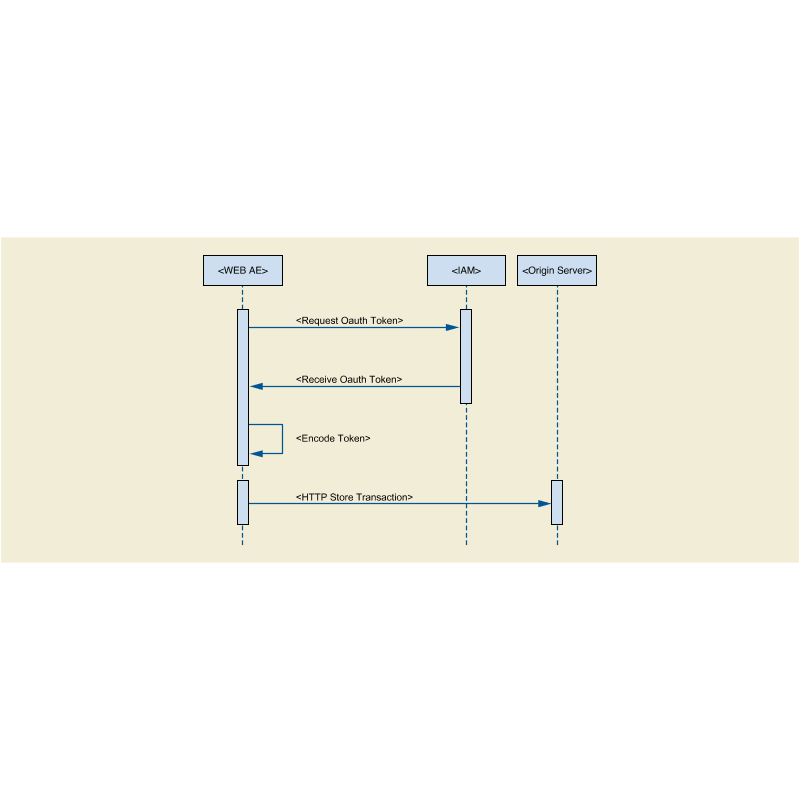


Figure ‎7‑5 Sequencing of Real-World Activities for <Web AE>

#### Association Parameters of <AE1>

Table ‎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.]*

Table ‎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>* |

#### 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* Section ‎7.2.1.3, “Association Initiation”*.x.]*

##### Real-World Activity <Activity 1>

*[Describe the policies for creating Associations. Include the following details:*

• *Policy with respect to 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 ‎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 ‎7‑3 Extended Negotiation for <Activity 1> 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 ‎5. | Level of support |  | *<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 ‎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 ‎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.]*

#### 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* Section ‎7.2.1.4, “Association Acceptance”*.x.]*

##### Real-World Activity <Activity 2>

*[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 ‎7‑4.

*[Describe below all the Extended Negotiation that the Application Entity supports for <Activity 2> 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 ‎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 ‎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 ‎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 ‎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 ‎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 ‎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* |  |

Table ‎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* |  |

## 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.]*

### General AE Communication and Failure Behavior and Handling

#### Communication Failure Behavior as Association Initiator

Table ‎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 ‎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* |

#### Communication Failure Handling as Association Acceptor

Table ‎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 ‎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* |

### DIMSE Services

#### Basic Worklist Management Service

##### SCU of the Modality Worklist Information Model Find SOP Class - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

##### SCP of the Modality Worklist Information Model Find SOP Class - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

#### Modality Performed Procedure Step Service

##### SCU of the Modality Performed Procedure Step SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Modality Performed Procedure Step SOP Class - N-SET

Table ‎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 ‎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 |  |
| 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 SOP 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 |  |

##### SCP of the Modality Performed Procedure Step SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Modality Performed Procedure Step SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

#### Unified Worklist und Procedure Step Service

##### SCU of the UPS Push SOP Class

###### SCU of the UPS Push SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the UPS Push SOP Class Request UPS Cancel - N-ACTION

Table ‎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 ‎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 |  |

###### SCU of the UPS Push SOP Class - N-GET

Table ‎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 ‎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 |  |

##### SCU of the UPS Pull SOP Class

###### SCU of the UPS Pull SOP Class - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

###### SCU of the UPS Pull SOP Class - N-GET

Table ‎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 ‎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 |  |

###### SCU of the UPS Pull SOP Class - N-SET

Table ‎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.

*[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 ‎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 |  |

###### SCU of the Change UPS State of UPS Pull SOP Class - N-ACTION

Table ‎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 ‎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 |  |
|  | 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 |  |

##### SCU of the UPS Watch SOP Class

###### SCU of the Un/Subscribe on UPS Watch SOP Class - N-ACTION

Table ‎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 ‎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 |  |
|  | 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 |  |

###### SCU of the UPS Watch SOP Class - N-GET

Table ‎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 ‎7‑24 Status Codes for N-GET of the UPS Watch 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 |  |

###### SCU of the UPS Watch SOP Class - C-FIND

Table ‎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 ‎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 |  |
| Failure | Refused: Out of Resources | A700 |  |
|  | Error: Data Set 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 |  |

###### SCU of the Request UPS Cancellation on UPS Watch SOP Class - N-ACTION

Table ‎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 ‎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 |  |
| 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 |  |

##### SCU of the UPS Event SOP Class

###### SCU of the UPS Event SOP Class - N-EVENT-REPORT

Table ‎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.

*[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 ‎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 SOP 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 |  |

##### SCP of the UPS Push SOP Class

###### SCP of the UPS Push SOP Class - N-CREATE

Table ‎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 ‎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 |  |
| Failure | Duplicate invocation | 0210 |  |
|  | Duplicate SOP Instance | 0111 |  |
|  | Invalid Attribute Value | 0106 |  |
|  | Invalid SOP 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 |  |

###### SCP of Request UPS Cancel on UPS Push SOP Class - N-ACTION

Table ‎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 ‎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 |  |
|  | 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 |  |

###### SCP of the UPS Push SOP Class - N-GET

Table ‎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 ‎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 |  |
|  | 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 |  |

##### SCP of the UPS Pull SOP Class

###### SCP of the UPS Pull SOP Class - C-FIND

Table ‎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 ‎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: Data Set 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 supported for existence for this Identifier | FF01 |  |

###### SCP of the UPS Pull SOP Class - N-GET

Table ‎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 ‎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 |  |

###### SCP of the UPS Pull SOP Class - N-SET

Table ‎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 ‎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 |  |

###### SCP of the Change UPS State of UPS Pull SOP Class - N-ACTION

Table ‎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 ‎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 |  |
|  | 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 |  |

##### SCP of the UPS Watch SOP Class

###### SCP of the Un/Subscribe on UPS Watch SOP Class - N-ACTION

Table ‎7‑35 lists the Status Codes that the SCP of the Un/Subscribe on the 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 ‎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 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 |  |

###### SCP of the UPS Watch SOP Class - N-GET

Table ‎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 ‎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 UPS Instance managed by this SCP | C307 |  |

###### SCP of the UPS Watch SOP Class - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

###### SCP of the Request UPS Cancellation on UPS Watch SOP Class - N-ACTION

Table ‎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 ‎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 |  |

##### SCP of the UPS Event SOP Class

###### SCP of the UPS Event SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 SOP 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 |  |

#### Instance Availability Notification Service

##### SCU of the Instance Availability Notification SOP Class - N-CREATE

Table ‎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 ‎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 |  |
|  | Attribute List Error | 0107 |  |
|  | Processing failure | 0110 |  |
|  | Duplicate SOP Instance | 0111 |  |
|  | Attribute Value Out of Range | 0116 |  |
|  | Invalid SOP 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 |  |

##### SCP of the Instance Availability Notification SOP Class - N-CREATE

Table ‎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 ‎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 |  |

#### Storage Service

##### SCU of the Storage SOP Classes - C-STORE

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Storage SOP Classes - C-STORE

Table ‎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 ‎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 |  |  |

#### Storage Commitment Service

##### SCU of the Storage Commitment Push Model SOP Class - N-ACTION

Table ‎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 ‎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 |  |
|  | Unrecognized operation | 0211 |  |
|  | Mistyped argument | 0212 |  |
|  | Resource limitation | 0213 |  |
| - | Other status codes | anything else |  |

##### SCU of the Storage Commitment Push Model SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 |  |

##### SCP of the Storage Commitment Push Model SOP Class - N-ACTION

Table ‎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 ‎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 |  |

##### SCP of the Storage Commitment Push Model SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 SOP 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 |  |

#### Query/Retrieve Service

##### SCU of the Query/Retrieve FIND SOP Classes - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

##### SCU of the Query/Retrieve MOVE SOP Classes - C-MOVE

Table ‎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 ‎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) |  |
| Data Set 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) |  |
| - | Other status codes | anything else | - |  |

##### SCP of the Query/Retrieve FIND SOP Classes - C-FIND

Table ‎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 ‎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: Data Set 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 |  |

##### SCP of the Query/Retrieve MOVE SOP Classes - C-MOVE

Table ‎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 due to above mentioned conditions. Mention what happens to the store sub-operation when the specific condition occurs.]*

Table ‎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) |  |  |
| Data Set 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) |  |  |

#### Print Management Service

##### SCU of the Basic Film Session SOP Class

###### SCU of the Basic Film Session SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Session SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Session SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Session SOP Class - N-ACTION

Table ‎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 ‎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 |  |
| 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 SOP 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 |  |

##### SCU of the Basic Film Box Session SOP Class

###### SCU of the Basic Film Box Session SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Box Session SOP Class - N-SET

Table ‎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.

*[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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Box Session SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Basic Film Box Session SOP Class - N-ACTION

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Basic Grayscale Image Box SOP Class - N-SET

Table ‎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.

*[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 ‎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 SOP 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 |  |

##### SCU of the Basic Color Image Box SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Printer SOP Class

###### SCU of the Printer SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Printer SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Basic Annotation Box SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Print Job SOP Class

###### SCU of the Print Job SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 |  |
| No Such Event Type | 0113 |  |
| No Such Argument | 0114 |  |
| Invalid Argument Value | 0115 |  |
| Invalid SOP 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 |  |

###### SCU of the Print Job SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Presentation LUT SOP Class

###### SCU of the Presentation LUT SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCU of the Presentation LUT SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

##### SCU of the Printer Configuration Retrieval SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Basic Film Session SOP Class

###### SCP of the Basic Film Session SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Basic Film Session SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Basic Film Session SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Basic Film Session SOP Class - N-ACTION

Table ‎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 ‎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 |  |

##### SCP of the Basic Film Box SOP Class

###### SCP of the Basic Film Box SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Basic Film Box SOP Class - N-SET

Table ‎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 ‎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 |  |
| Failure | No Such Attribute | 0105 |  |
| Invalid Attribute Value | 0106 |  |
| Processing Failure | 0110 |  |
| Duplicate SOP Instance | 0111 |  |
| Invalid SOP 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 |  |

###### SCP of the Basic Film Box SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Basic Film Box SOP Class - N-ACTION

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Basic Grayscale Image Box SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Basic Color Image Box SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Printer SOP Class

###### SCP of the Printer SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 SOP Instance | 0117 |  |
| No Such SOP Class | 0118 |  |
| Class-Instance Conflict | 0119 |  |
| Duplicate Invocation | 0210 |  |
| Unrecognized Operation | 0211 |  |
| Mistyped Argument | 0212 |  |
| Resource Limitation | 0213 |  |

###### SCP of the Printer SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

##### SCP the Basic Annotation Box SOP Class - N-SET

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Print Job SOP Class

###### SCP of the Print Job SOP Class - N-EVENT-REPORT

Table ‎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 ‎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 SOP Instance | 0117 |  |
| No Such SOP Class | 0118 |  |
| Class-Instance Conflict | 0119 |  |
| Duplicate Invocation | 0210 |  |
| Unrecognized Operation | 0211 |  |
| Mistyped Argument | 0212 |  |
| Resource Limitation | 0213 |  |

###### SCP of the Print Job SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Presentation LUT SOP Class

###### SCP of the Presentation LUT SOP Class - N-CREATE

Table ‎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 ‎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 SOP 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 |  |

###### SCP of the Presentation LUT SOP Class - N-DELETE

Table ‎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 ‎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 SOP 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 |  |

##### SCP of the Printer Configuration Retrieval SOP Class - N-GET

Table ‎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 ‎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 SOP 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 |  |

### DICOM Web Services

#### General Status Codes

This section describes the common Status Code behavior and handling all the supported transaction.

##### Common Transaction as Origin Server

Table ‎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 ‎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) |  |
| 415 (Unsupported Media Type) |  |
| Server Error | 500 (Internal Server Error) |  |
| 501 (Not Implemented) |  |
| 503 (Service Unavailable) |  |
| 505 (HTTP Version Not Supported) |  |

##### Common Transaction as User Agent

Table ‎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 ‎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) |  |
| 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 |  |

#### URI Web Service

##### URI Web Service as Origin Server

Table ‎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 ‎7‑90 Status Codes of Origin Server for URI Service

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| Success | 200 (OK) |  |
| Failure | 400 (Bad) |  |
| 404 (Not Found) |  |
| 410 (Gone) |  |

##### URI Web Service as User Agent

Table ‎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.]*

Table ‎7‑91 Status Codes of User Agent for URI Service

| **Status** | **Code** | **Behavior** |
| --- | --- | --- |
| Success | 200 (OK) |  |
| Failure | 400 (Bad) |  |
| 404 (Not Found) |  |
| 410 (Gone) |  |
| - | Other status codes |  |

#### Studies Web Service

##### Retrieve Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Retrieve Transaction as User Agent

Table ‎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 ‎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 |  |

##### Store Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Store Transaction as User Agent

Table ‎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 ‎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 |  |

##### Search Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Search Transaction as User Agent

Table ‎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 ‎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 |  |

#### Worklist Web Service

##### Create Transaction as Origin Server

Table ‎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 ‎7‑98 Status Codes of Origin Server for Create Transaction

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| Success | 201 (Created) |  |
| Failure | 400 (Bad Request) |  |
| 409 (Conflict) |  |

##### Create Transaction as User Agent

Table ‎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 ‎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 |  |

##### Retrieve Workitem Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Retrieve Workitem Transaction as User Agent

Table ‎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 ‎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 |  |

##### Update Workitem Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Update Workitem Transaction as User Agent

Table ‎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 ‎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 |  |

##### Change Workitem State Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Change Workitem State Transaction as User Agent

Table ‎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 ‎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 |  |

##### Request Cancellation Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Request Cancellation Transaction as User Agent

Table ‎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 ‎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 |  |

##### Search Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Search Transaction as User Agent

Table ‎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 ‎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 |  |

##### Subscribe Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Subscribe Transaction as User Agent

Table ‎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 ‎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 |  |

##### Unsubscribe Transaction as Origin Server

Table ‎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 ‎7‑112 Status Codes of Origin Server for Unsubscribe Transaction

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| Success | 200 (OK) |  |
| Failure | 400 (Bad Request) |  |
|  | 404 (Not Found) |  |

##### Unsubscribe Transaction as User Agent

Table ‎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 ‎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 |  |

##### Suspend Global Subscription Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Suspend Global Subscription Transaction as User Agent

Table ‎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 ‎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 |  |

#### Non-Patient Instance Web Service

##### Retrieve Transaction as Origin Server

Table ‎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 ‎7‑116 Status Codes of Origin Server for Retrieve Transaction

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| Success | 200 (OK) |  |
| Failure | 400 (Bad Request) |  |
| 404 (Not Found) |  |
| 406 (Unsupported Media Type) |  |

##### Retrieve Transaction as User Agent

Table ‎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 ‎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 |  |

##### Store Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Store Transaction as User Agent

Table ‎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 ‎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 |  |

##### Search Transaction as Origin Server

Table ‎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 ‎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) |  |

##### Search Transaction as User Agent

Table ‎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.]*

Table ‎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 |  |

#### Storage Commitment Service

##### Request Transaction As Origin Server

Table ‎7‑122 lists the Status Codes that an origin server supports for the Request Transaction of the Storage Commitment Service and the condition in which any of the listed Status Codes is sent.

*[Describe below the condition in which the application sends the specific Status Codes in the Request Transaction response as origin server.]*

Table ‎7‑122 Status Codes of Origin Server for Request Transaction

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| *Success* | *200 (OK)* | *The origin server finished processing the storage commitment request* |
| *202 (Accepted)* | *The origin server has not finished processing the storage commitment request yet* |
| *Failure* | *400 (Bad Request)* | *The origin server cannot handle the storage commitment request because of errors in the request headers or parameters* |
| *409 (Conflict)* | *The origin server cannot handle the storage commitment request because the provided transaction UID is already in use* |
| *503 (Service Unavailable)* | *The origin server cannot handle the storage commitment request; this may be a temporal or permanent state* |

##### Request Transaction As User Agent

Table ‎7‑123 lists the Status Codes that a user agent supports for the Request Transaction of the Storage Commitment Service and defines the application behavior, when encountering any of the listed Status Codes.

*[Describe below the behavior of the application when it receives various Status Codes in the Request Transaction response.]*

Table ‎7‑123 Status Codes of User Agent for Request Transaction

| **Status** | **Code** | **Behavior** |
| --- | --- | --- |
| *Success* | *200 (OK)* | *Mark all SOP Instances for which the origin server committed safe storage as ready for deletion* |
| *202 (Accepted)* | *Retry later to get the result of the request* |
| *Failure* | *400 (Bad Request)* | *Reformat the request to proper HTTP* |
| *409 (Conflict)* | *Retry with another transaction UID* |
| *\** | *Any other code* | *Do further analysis* |

##### Result Check Transaction As Origin Server

Table ‎7‑124 lists the Status Codes that an origin server supports for the Result Check Transaction of the Storage Commitment Service and the condition in which any of the listed Status Codes is sent.

*[Describe below the condition in which the application sends the specific Status Codes in the Result Check Transaction response as origin server.]*

Table ‎7‑124 Status Codes of Origin Server for Result Check Transaction

| **Status** | **Code** | **Condition** |
| --- | --- | --- |
| *Success* | *200 (OK)* | *The origin server finished processing the storage commitment request* |
| *202 (Accepted)* | *The origin server has not finished processing the storage commitment request yet* |
| *Failure* | *404 (Not Found)* | *The origin server cannot find the storage commitment request result* |
| *410 (Gone)* | *The origin server can no longer provide the storage commitment request result* |
| *503 (Service Unavailable)* | *The origin server cannot handle the result check request; this may be a temporary or permanent state* |

##### Result Check Transaction As User Agent

Table ‎7‑125 lists the Status Codes that a user agent supports for the Result Check Transaction of the Storage Commitment Service and defines the application behavior when encountering any of the listed Status Codes.

*[Describe below the behavior of the application when it receives various Status Codes in the Result Check Transaction response.]*

Table ‎7‑125 Status Codes of User Agent for Result Check Transaction

| **Status** | **Code** | **Behavior** |
| --- | --- | --- |
| *Success* | *200 (OK)* | *Mark all SOP Instances for which the origin server committed safe storage as ready for deletion* |
| *202 (Accepted)* | *Retry later to get the result of the request* |
| *Failure* | *404 (Not Found)* | *Start all over with a storage commitment request* |
| *410 (Gone)* | *Start all over with a storage commitment request* |
| *\** | *Any other code* | *Do further analysis* |

# 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.]*

## 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.

## External Network Requirements

Table ‎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 ‎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>>* |  | ‎C.1.1 |
|  |  | Find NTP Servers | NTP | RFC5905;  *<<RFC5906*  *RFC8633>>* |  | ‎C.1.1 |
|  | NTP Client | Maintain Time | NTP | RFC5905;  *<<RFC5906*  *RFC8633>>* |  | ‎C.1.1 |
|  |  | Find NTP Servers | NTP | RFC5905;  *<<RFC5906*  *RFC8633>>* |  | ‎C.1.1 |
|  | SNTP Client | Maintain Time | SNTP | RFC2030 |  | ‎C.1.1 |
|  | DHCP Server | Find NTP Servers | DHCP | RFC2131;  RFC2132;  RFC2563 |  | ‎C.1.1 |
|  | DHCP Client | Find NTP Servers | DHCP | RFC2131;  RFC2132;  RFC2563 |  | ‎C.1.1 |
| Basic Network Address Management | DHCP Server | Configure DHCP Server | - | - |  | ‎C.1.2 |
|  |  | Find and Use DHCP Server | DHCP | RFC2131;  RFC2132;  RFC2563 |  | ‎C.1.2 |
|  |  | Maintain Lease | DCP | RFC2131;  RFC2132 |  | ‎C.1.2 |
|  |  | Resolve Hostname | DNS | RFC1035;  RFC2181 |  | ‎C.1.2 |
|  |  | DDNS Coordination | DNS | RFC2136 |  | ‎C.1.2 |
|  | DHCP Client | Find and Use DHCP Server | DHCP | RFC2131;  RFC2132;  RFC2563 |  | ‎C.1.2 |
|  |  | Maintain Lease | DHCP | RFC2131;  RFC2132 |  | ‎C.1.2 |
|  | DNS Server | DNS Coordination | DNS | RFC2136;  *<<RFC4033*  *RFC4034*  *RFC4035>>* |  | ‎C.1.2 |
|  |  | Resolve Hostname | DNS | RFC1035;  RFC2181;  *<<RFC4033*  *RFC4034*  *RFC4035>>* |  | ‎C.1.2 |
|  | DNS Client | Resolve Hostname | DNS | RFC1035;  RFC2181;  *<<RFC4033*  *RFC4034*  *RFC4035>>* |  | ‎C.1.2 |
| Application Configuration Management | LDAP Server | Query LDAP Server | LDAP | RFC2251 |  | ‎C.1.3 |
|  |  | Update LDAP Server | LDAP | RFC2251 |  | ‎C.1.3 |
|  |  | Maintain LDAP Server | LDAP | RFC2849 |  | ‎C.1.3 |
|  | LDAP Client | Find LDAP Server | LDAP | RFC2181;  RFC2219;  RFC2782 |  | ‎C.1.3 |
|  |  | Query LDAP Server | LDAP | RFC2251 |  | ‎C.1.3 |
|  |  | Update LDAP Server | LDAP | RFC2251 |  | ‎C.1.3 |
|  | DNS Server | Find LDAP Server | LDAP | RFC2181;  RFC2219;  RFC2782 |  | ‎C.1.3 |
| DNS Service Discovery | DNS Server | Find DICOM Service | DNS | RFC2136;  RFC2181;  RFC2219;  RFC2782;  RFC6762;  RFC6763;  RFC8553;  *<<RFC4033*  *RFC4034*  *RFC4035>>* |  | ‎C.1.4 |
|  | DNS Client | Find DICOM Service | DNS | RFC2136;  RFC2181;  RFC2219;  RFC2782;  RFC6762;  RFC6763;  RFC8553;  *<<RFC4033*  *RFC4034*  *RFC4035>>* |  | ‎C.1.4 |
| *[Any additional profile]* |  |  |  |  |  |  |

## TCP Port Configuration

See Section ‎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.]*

## DICOM Security Profiles Support

### Secure Use and User Identity Profiles

Table ‎8‑2 lists the Secure Use and User Identity Profiles:

*[In* Table ‎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 ‎8‑2 Secure Use and User Identity Profiles

| **Profile** | **Creator/Sender** | **Consumer/Receiver** | **Reference** |
| --- | --- | --- | --- |
| Online Electronic Storage Secure Use |  |  | ‎C.2.1 |
| Audit Trail Message Format |  |  | ‎C.2.2 |
| Audit Trail Message Transmission Profile - SYSLOG-TLS |  |  | ‎C.2.3 |
| Audit Trail Message Transmission Profile - SYSLOG-UDP |  |  | ‎C.2.4 |
| Basic User Identity Association |  |  | ‎8.5 |
| User Identity Plus Passcode Association |  |  | ‎8.5 |
| Kerberos Identity Negotiation Association |  |  | ‎8.5 |
| Generic SAML Assertion Identity Negotiation Association |  |  | ‎8.5 |
| *[Any additional profile]* |  |  |  |

### Secure Transport Connection Profiles

*[In* Table ‎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 ‎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 ‎8‑3 Secure Transport Connection Profiles

| **Profile** | **Secured AE** | **Sender** | **Receiver** | **Reference** |
| --- | --- | --- | --- | --- |
| BCP 195 RFC 8996 TLS Secure Transport Connection Profile |  |  |  | ‎C.2.5 |
| Modified BCP 195 RFC 8996 TLS Secure Transport Connection Profile |  |  |  | ‎C.2.5 |
| *[Any additional or retired TLS Profile]* |  |  |  |  |

### Media Storage Security Profiles

See Section ‎1.4 Media Services for information on supported secured Application Profiles and secured media.

Table ‎8‑4 details the encryption mechanisms that are supported with secure media.

*[In* Table ‎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 ‎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 ‎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 ‎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 ‎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 ‎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]* |  |  |

### Attribute Confidentiality Profiles

Table ‎8‑7 lists supported Attribute Confidentiality Profiles and options:

*[In* Table ‎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 ‎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 Annex ‎C.2.6 for implementation details.

### Digital Signature Profiles

*[List here any Digital Signature Profile that your product may support. Also document the details of the supported profiles in* Annex ‎C.2.7*. Mark this section as N/A if your product does not support any Digital Signature profile.]*

### 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.]*

## User Identity Negotiation Support

*[If your product does not support any User Identity Negotiation, mark this section as N/A and delete subsections.]*

### Association Initiation

Table ‎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 ‎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* Section ‎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).]*

### Association Acceptance

Table ‎8‑9 lists User Identity Negotiation support as Association Acceptor:

*[In the following table, if your product supports User Identity Negotiation 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 ‎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.]*

## 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.]*

## Other Security Features

*[Describe in the following subsections any additional security features not covered in previous sections that your product may support.]*

### Media Storage Security

*[Describe here any support of additional media storage security features such as encrypted media. Put "N/A" if none.]*

### Network Security

*[Describe here any support additional network security features such as VPN, etc. Put "N/A" if none.]*

### 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.]*

**Annexes**

1. 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 ‎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 ‎1‑1). Details on Attribute coercion are defined in Section ‎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).

* 1. Information Shared Across Multiple IODs
     1. Common Modules

All SOP Instances generated by the system use the common modules listed in Table ‎A‑1 to Table ‎A‑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*](part16.html#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* [*PS3.15*](part15.html#PS3.15)*), add the Value Type supported in the "Comments" column.]*

Table ‎A‑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 ‎D |
| … |  |  |  |  |  |  |  |

Table ‎A‑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 ‎D |
| … |  |  |  |  |  |  |  |
| *Requesting Service Code Sequence* | *(0032,1034)* | *MWL; CONFIGURATION* | *ALWAYS* | *ALWAYS* | *See* Annex ‎A.1.4 | *Copied from MWL or read from Configuration File* |  |
| … |  |  |  |  |  |  |  |

Table ‎A‑3 General Series Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Modality | (0008,0060) | *FIXED* | *ALWAYS* | *ALWAYS* | *CT* |  |  |
| Series Instance UID | (0020,000E) | *GENERATED* | *ALWAYS* | *ALWAYS* |  |  |  |
| … |  |  |  |  |  |  |  |

Table ‎A‑4 Frame of Reference Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| … |  |  |  |  |  |  |  |

Table ‎A‑5 General Equipment Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| … |  |  |  |  |  |  |  |

Table ‎A‑6 Enhanced General Equipment Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

Table ‎A‑7 General Image Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| … |  |  |  |  |  |  |  |

Table ‎A‑8 Image Pixel Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Photometric Interpretation | (0028,0004) | *GENERATED* | *ALWAYS* |  | *See* Annex ‎A.1.4 |  |  |
| … |  |  |  |  |  |  |  |

Table ‎A‑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) |  |  |  |  |  |  |
| > [ *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]* |  |  |  |  |  |  |  |
| … |  |  |  |  |  |  |  |

Table ‎A‑10 Multi-Frame Dimension Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| … |  |  |  |  |  |  |  |

Table ‎A‑11 Acquisition Context Module

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| … |  |  |  |  |  |  |  |

Table ‎A‑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* |  |  |  |
| Specific Character Set | (0008,0005) | *CONFIGURATION* | *CONDITIONAL* | *ALWAYS* | *See* Section ‎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.]*

* + 1. 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‑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‑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‑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‑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‑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‑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‑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)* |  |  |  |  |  |  |

* + 1. 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*](part03.html#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‑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‑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* |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

* + 1. Coded Values

Table ‎A‑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‑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* |  |

* 1. <image IOD1 E.g. Computed Tomography Image IOD>

Table ‎A‑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‑23 <Image IOD 1>

| **IE** | **Module Name** | **Presence (Module)** | **Condition** | **Reference** |
| --- | --- | --- | --- | --- |
| *Patient* | *Patient Module* | *ALWAYS* |  | Table ‎A‑1 |
| *Study* | *General Study Module* | *ALWAYS* |  | Table ‎A‑2 |
| *Series* | *General Series Module* | *ALWAYS* |  | Table ‎A‑3 |
| *Frame Of Reference* | *Frame of Reference* | *ALWAYS* |  | Table ‎A‑4 |
| *Equipment* | *General Equipment Module* | *ALWAYS* |  | Table ‎A‑5 |
| *Image* | *General Image Module* | *ALWAYS* |  | Table ‎A‑7 |
|  | *Image Plane Module* | *ALWAYS* |  | Table ‎A‑24 |
|  | *CT Image* | *ALWAYS* |  | Table ‎A‑25 |
|  | *Image Pixel Module* | *ALWAYS* |  | Table ‎A‑8 |
|  | *SOP Common Module* | *ALWAYS* |  | Table ‎A‑12 |
|  | *Private Module 1* | *CONDITIONAL* | *Present for Acquisition Protocol XXX* | Table ‎A‑20 |
|  | *Private Module 2* | *ALWAYS* |  | Table ‎A‑21 |
|  | *Private Module 3* | *ALWAYS* |  | Table ‎A‑26 |

* + 1. *<Image IOD 1>* Specific Modules

The following tables list Modules and Attributes specific for *<Image 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 SectionA.A Information Object Definitions (IODs).]*

Table ‎A‑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‑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"* |  |  |

* + 1. *<Image IOD 1>* Functional Group Macros - NA

N/A

* + 1. *<Image IOD 1>* Private Modules

Table ‎A‑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‑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* |  |  |
| *…* |  |  |  |  |  |  |  |  |  |

* + 1. *<Image IOD 1>* Coded Values

Table ‎A‑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‑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* |  |
| *…* |  |  |

* 1. <image IOD 2 E.g., Enhanced Computed Tomography Image IOD>

Table ‎A‑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‑28 <Image IOD 2>

| **IE** | **Module Name** | **Presence (Module)** | **Condition** | **Reference** |
| --- | --- | --- | --- | --- |
| *Patient* | *Patient Module* | *ALWAYS* |  | Table ‎A‑1 |
| *Study* | *General Study Module* | *ALWAYS* |  | Table ‎A‑2 |
| *Series* | *General Series Module* | *ALWAYS* |  | Table ‎A‑3 |
|  | *CT Series Module* | *ALWAYS* |  | Table ‎A‑30 |
| *Frame of Reference* | *Frame of Reference* | *ALWAYS* |  | Table ‎A‑4 |
| *Equipment* | *General Equipment Module* | *ALWAYS* |  | Table ‎A‑5 |
|  | *Enhanced General Equipment* | *ALWAYS* |  | Table ‎A‑6 |
| *Image* | *Image Pixel* | *ALWAYS* |  | Table ‎A‑8 |
|  | *Multi-Frame Functional Groups* | *ALWAYS* |  | Table ‎A‑9 |
|  | *Multi-Frame Dimension* | *ALWAYS* |  | Table ‎A‑10 |
|  | *Acquisition Context* | *ALWAYS* |  | Table ‎A‑11 |
|  | *Enhanced CT Image* | *ALWAYS* |  | Table ‎A‑31 |
|  | *SOP Common Module* | *ALWAYS* |  | Table ‎A‑12 |

Table ‎A‑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‑29 Functional Group Macros used in < Image IOD 2>

| **Functional Group Macro** | **Presence** | **Condition** | **Usage** | **Reference** |
| --- | --- | --- | --- | --- |
| *Pixel Measures* | *ALWAYS* |  | *PER\_FRAME* | Table ‎A‑13 |
| *Frame Content* | *ALWAYS* |  | *PER\_FRAME* | Table ‎A‑14 |
| *Plane Position (Patient)* | *ALWAYS* |  | *SHARED* | Table ‎A‑15 |
| *Frame Anatomy* | *ALWAYS* |  | *CONTEXT\_DEPENDENT* | Table ‎A‑18 |
| *Irradiation Event Identification* | *ALWAYS* |  | *PER\_FRAME* | Table ‎A‑19 |
| *CT Image Frame Type* | *ALWAYS* |  | *PER\_FRAME* | Table ‎A‑32 |
| *CT Acquisition Type* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑33 |
| *CT Acquisition Details* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑34 |
| *CT Table Dynamics* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑35 |
| *CT Position* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑36 |
| *CT Geometry* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑37 |
| *CT Reconstruction* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑38*.* |
| *CT Exposure* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑39 |
| *CT X-Ray Details* | *CONDITIONAL* | *For images with Image Type (0008,0008) Value 1 as ORIGINAL or MIXED* | *SHARED* | Table ‎A‑40 |
| *CT Pixel Value Transformation* | *ALWAYS* |  | *SHARED* | Table ‎A‑41 |
| *CT Additional X-Ray Source* | *CONDITIONAL* | *For systems with multiple X-Ray sources* | *SHARED* | Table ‎A‑42 |
| *Multi-energy CT Characteristics* | *CONDITIONAL* | *For systems with multiple X-Ray sources* | *SHARED* | Table ‎A‑43 |
| *..* |  |  |  |  |

* + 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 SectionA.A Information Object Definitions (IODs).]*

Table ‎A‑30 CT Series Module for <Image IOD 2>

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

Table ‎A‑31 Enhanced CT Image Module for <Image IOD 2>

| **Attribute Name** | **Tag** | **Source** | **Presence of Attribute** | **Presence of Value** | **Value** | **Conditions** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

* + 1. *<Image IOD 2>* Functional Group Macro

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‑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‑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‑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‑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‑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‑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‑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‑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‑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‑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‑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‑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)* |  |  |  |  |  |  |

* + 1. *<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.]*

* + 1. *<Image IOD 2>* Coded Values

Table ‎A‑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‑44 Values and Code Sets for <Image IOD 2>

| **Attribute Name** | **Tag** | **Value/Code** | **Condition** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |

* 1. <SR IOD 1 E.g., Comprehensive SR IOD>

Table ‎A‑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 a Comprehensive SR IOD.]*

Table ‎A‑45 <SR IOD 1>

| **IE** | **Module Name** | **Presence (Module)** | **Condition** | **Reference** |
| --- | --- | --- | --- | --- |
| *Patient* | *Patient Module* | *ALWAYS* |  | Table ‎A‑1 |
| *Study* | *General Study Module* | *ALWAYS* |  | Table ‎A‑2 |
| *Series* | *SR Document Series Module* | *ALWAYS* |  | Table ‎A‑47 |
| *Equipment* | *General Equipment Module* | *ALWAYS* |  | Table ‎A‑5 |
| *Document* | *SR Document General Module* | *ALWAYS* |  | Table ‎A‑47 |
|  | *SR Document Content* | *ALWAYS* |  | Table ‎A‑48 |
|  | *SOP Common Module* | *ALWAYS* |  | Table ‎A‑12 |

* + 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 SectionA.A Information Object Definitions (IODs).]*

Table ‎A‑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 ‎D *for details)* | *See* Annex ‎D |  |
| .. |  |  |  |  |  |  |  |

Table ‎A‑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 ‎D | *See* Annex ‎D |  |
| … |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Table ‎A‑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 ‎B *for encoding on supported TIDs* |  |  |

* + 1. *<SR IOD 1*> Functional Group Macros - N/A

N/A

* + 1. *<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.]*

* + 1. *<SR IOD 1*> Coded Values

Table ‎A‑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‑49 SR IOD 1>

| **Attribute Name** | **Tag** | **Value/Code** | **Condition** | **Comments** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |

* 1. Basic Directory IOD

Table ‎A‑50 defines the structure of the Basic Directory IOD.

Table ‎A‑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) |  |  |  |  |  |  |

* 1. <Private IOD 1>

Table ‎A‑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‑51 <Private IOD 1>

| **IE** | **Module Name** | **Presence (Module)** | **Condition** | **Reference** |
| --- | --- | --- | --- | --- |
| *Patient* | *Patient Module* | *ALWAYS* |  | Table ‎A‑1 |
| *Study* | *General Study Module* | *ALWAYS* |  | Table ‎A‑2 |
| *Series* | *General Series Module* | *ALWAYS* |  | Table ‎A‑3 |
| *Frame of Reference* | *Frame of Reference* | *ALWAYS* |  | Table ‎A‑4 |
| *Equipment* | *General Equipment Module* | *ALWAYS* |  | Table ‎A‑5 |
|  | *Private Module 1* | *CONDITIONAL* | *Present for Acquisition Protocol XXX* | Table ‎A‑20 |
|  | *Private Module 2* | *ALWAYS* |  | Table ‎A‑21 |
|  | *Private Module 4* | *ALWAYS* |  | Table ‎A‑52 |
|  | *Private Module 5* | *ALWAYS* |  | Table ‎A‑54 |
| *Image* | *SOP Common Module* | *ALWAYS* |  | Table ‎A‑12 |

* + 1. *<Private IOD 1>* Specific Modules - NA

N/A

* + 1. *<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.]*

* + 1. *<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 SectionA.A Information Object Definitions (IODs).]*

Table ‎A‑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* |  |  |  | *PRIVATECREATOR* |  |  |
|  |  |  |  |  |  |  |  | *TERM1* |  |  |

Table ‎A‑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* |  |  |  |  | *PRIVATECREATOR5* |  |  |
| *Private Attribute 7* | *(0039,yy01)* | *CS* | *1* | *UN SAFE* |  |  |  | *See* Table ‎A‑54 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

* + 1. *<Private IOD 1>* Coded Values

Table ‎A‑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".]*

Table ‎A‑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* |  |
|  |  |  |  |  |

1. 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 ‎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* Annex ‎B.2*.]*

This section provides the detailed content encoding for all TIDs supported by *<product>.*

Throughout the tables listed in Annex ‎B 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 Content Item" 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 "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).

* 1. Mammography CAD SR (TID 4000)

Table ‎B‑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*](part16.html#PS3.16) *if used unmodified or provide a table in* Annex ‎B.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 ‎B‑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 ‎B‑2 | *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* |  |
| *>>* | *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 ‎B‑3 | *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* |  |
| *>>>>* | *HAS PROPERTIES* | *TEXT* | *(111001, DCM, "Algorithm Name")* | *GENERATED* |  |  | *4019* |  |
| *>>>>* | *HAS PROPERTIES* | *TEXT* | *(111003, DCM, "Algorithm Version")* | *GENERATED* |  |  | *4019* |  |
| *>>>* | *HAS PROPERTIES* | *CODE* | *(129715009, SCT, "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 ‎B‑3 | *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* |  |
| *>>>>>* | *R-HAS PROPERTIES* | *IMAGE* |  | *GENERATED* |  |  | *4021* |  |

* + 1. Code Sets

The following tables list specific code sets referenced from the Mammography CAD SR (TID 4000).

Table ‎B‑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 ‎B‑3 Mammography CAD SR - Single Image Finding Codes

| **Coding Scheme Designator** | **Code Value** | **Code Meaning** |
| --- | --- | --- |
| *SCT* | *129793001* | *Mammography breast density* |
| *SCT* | *129770007* | *Individual Calcification* |
| *SCT* | *129769006* | *Calcification Cluster* |

* 1. Echocardiography Procedure Result SR (TID 5200)

Table ‎B‑4 shows the encoding of content of a DICOM Echocardiography Procedure Report (TID 5200).

*[*Table ‎B‑4 *shows how to document TID content usage, with TID 5200 as an example." Modify to match your product implementation, e.g., select supported concepts and Values, and add additional templates as needed.]*

Table ‎B‑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* |  |
| *>* | *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* Annex ‎B.2.1 | *5202* |  |
| *The following rows are supported for all Finding Sites listed in* Annex ‎B.2.1*. Values for supported concepts are listed in the "Modifier" column of the Tables in the respective subsections of* Annex ‎B.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* Annex ‎B.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 Anatomic Sites"* | *300* |  |
| *>>>>* | *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* |  |

* + 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.]*

Left Ventricle

Table ‎B‑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 ‎B‑4 *in* Annex ‎B.2 *and add a code for each Modifier Value.]*

Table ‎B‑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")* |
| *…* |  |  |  |  |

Right Ventricle

Table ‎B‑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 ‎B‑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")* |
| *…* |  |  |  |  |

1. 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 ‎8.

* 1. External Network Requirement Details
     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.]*

* + 1. 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 (RFC 4033, RFC 4034, RFC 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.]

* + 1. Application Configuration Management

Table ‎C‑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 ‎C‑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]* |  |  |

* + 1. DNS Service Discovery

[If DNSSEC is supported (RFC 4033, RFC 4034, RFC 4035) for the interactions to achieve DNS Service Discovery, describe the options supported here or provide a reference to the document describing them.]

* 1. DICOM Security Profile Details
     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.]*

* + 1. Audit Trail Messages

Table ‎C‑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 ‎C‑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 ‎C‑3 specifies the implementation details of each audit message supported by this product.

Table ‎C‑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]* | | | |

* + 1. Audit Trail Message Transmission Profile - SYSLOG - TLS

See Section ‎6.6 Audit Trail Syslog Configuration for information about Syslog-TLS parameters.

* + 1. Audit Trail Message Transmission Profile - SYSLOG - UDP

See Section ‎6.6 Audit Trail Syslog Configuration for information about Syslog-UDP parameters.

* + 1. Secure Transport Connection Details

Table ‎C‑4 lists the secure transport connection profiles and cipher suites supported for TLS 1.3:

*[Describe here the mechanisms and tools that are supported by the implementation for Certificate Distribution, Certificate Validation and Key Management.]*

*[In* Table ‎C‑4 Secure Transport Connection Profiles and Cipher Suites*, add any Profile claimed in* Section ‎8.4.2 Secure Transport Connection Profiles*. For each Profile, list all TLS 1.3 Cipher suites supported by your product and fill in the "Default Preference Order" column if applicable.]*

Table ‎C‑4 Secure Transport Connection Profiles and Cipher Suites

| **Profile** | **Cipher Suite** | **Default Preference Order (from 1=preferred to n=less preferred)** |
| --- | --- | --- |
| Modified BCP 195 RFC 8996 TLS Secure Transport Connection Profile | TLS\_AES\_256\_GCM\_SHA384 |  |
|  | TLS\_CHACHA20\_POLY1305\_SHA256 |  |
|  | TLS\_AES\_128\_GCM\_SHA256 |  |
|  | TLS\_AES\_128\_GCM\_SHA256 |  |
|  | TLS\_AES\_128\_CCM\_8\_SHA256 |  |
| *[Any TLS Profile supported by <product>]* | *[Any Cypher suite]* |  |

Table ‎C‑5 lists the secure transport connection profiles and key exchange algorithms supported for TLS 1.3:

*[In* Table ‎C‑5 Secure Transport Connection Profiles and TLS 1.3 Key Exchange Algorithms*, add any Profile claimed in* Section ‎8.4.2 Secure Transport Connection Profiles*. For each Profile, list all TLS 1.3 key exchange algorithms supported by your product and fill in the “Default Preference Order” column if applicable]*

Table ‎C‑5 Secure Transport Connection Profiles and TLS 1.3 Key Exchange Algorithms

| **Profile** | **Cipher Suite** | **Default Preference Order (from 1=preferred to n=less preferred)** |
| --- | --- | --- |
| Modified BCP 195 RFC 8996 TLS Secure Transport Connection Profile | ECDHE |  |
|  | DHE |  |
| *[Any TLS Profile supported by <product>]* | *[Any key exchange algorithm]* |  |

Table ‎C‑6 lists the secure transport connection profiles and signature algorithms supported for TLS 1.3:

*[In* Table ‎C‑6 Secure Transport Connection Profiles and TLS 1.3 Signature Algorithms*, add any Profile claimed in* Section ‎8.4.2 Secure Transport Connection Profiles*. For each Profile, list all TLS 1.3 signature algorithms supported by your product and fill in the “Default Preference Order” column if applicable]*

Table ‎C‑6 Secure Transport Connection Profiles and TLS 1.3 Signature Algorithms

| **Profile** | **Cipher Suite** | **Default Preference Order (from 1=preferred to n=less preferred)** |
| --- | --- | --- |
| Modified BCP 195 RFC 8996 TLS Secure Transport Connection Profile | ECDSA |  |
|  | RSASSA PKCS#1 v1.5 (RSA) |  |
|  | RSASSA-PSS |  |
| *[Any TLS Profile supported by <product>]* | *[Any signature algorithm]* |  |

Table ‎C‑7 lists the secure transport connection profiles and cipher suites supported for TLS 1.2:

*[In* Table ‎C‑7*, add any Profile claimed in* Section ‎8.4.2 *Secure Transport Connection Profiles. For each Profile, list all TLS 1.2 Cipher suites supported by your product and fill in the "Default Preference Order" column if applicable.]*

Table ‎C‑7 Secure Transport Connection Profiles and Cipher Suites

| **Profile** | **Cipher Suite** | **Default Preference Order (from 1=preferred to n=less preferred)** |
| --- | --- | --- |
| *Modified BCP 195 RFC 8996 TLS Secure Transport Connection Profile* | *TLS\_ECDHE\_ECDSA\_WITH\_AES\_256\_GCM\_SHA384* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_CAMELLIA\_256\_GCM\_SHA384* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_CAMELLIA\_256\_GCM\_SHA384* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_AES\_256\_CCM* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_AES\_256\_CCM\_8* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_CHACHA20\_POLY1305\_SHA256* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_CHACHA20\_POLY1305\_SHA256* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_CAMELLIA\_128\_GCM\_SHA256* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_CAMELLIA\_128\_GCM\_SHA256* |  |
|  | *TLS\_ECDHE\_RSA\_WITH\_CAMELLIA\_128\_GCM\_SHA256* |  |
|  | *TLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_CCM\_8* |  |
|  | *[Other Cipher Suites]* |  |
| *[Any TLS Profile supported by <product>]* | *[Any Cypher suite]* |  |

*[Describe here the mechanisms and tools that are supported by the implementation for Certificate Distribution, Certificate Validation and Key Management.]*

Table ‎C‑8 describes the configurable parameters and behaviors supported by this product for the Secure Transport Connection:

*[Indicated in the "Configurable" column whether the parameters are configurable (Y) or not (N).]*

Table ‎C‑8 Secure Transport Connection Configuration

| **Local Secure Transport Connection Configuration** | | | |
| --- | --- | --- | --- |
| **Parameter/Behavior** | **Configurable** | **Default Value** | **Comments** |
| Common Secure Transport Connection parameters | | | |
| Port | See Section ‎6 Configuration | | |
| A-P-ABORT provider reason in case of integrity check failure |  |  |  |
| … | *…* |  |  |
| BCP 195 RFC 8996 TLS Secure Transport Connection | | | |
| *[List specific configurable parameters for the local system]* |  |  |  |
|  |  |  |  |
| Modified BCP 195 RFC 8996 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 ‎6 Configuration | | |
| A-P-ABORT provider reason in case of integrity check failure |  |  |  |
| … | … |  |  |
| BCP 195 RFC 8996 TLS Secure Transport Connection | | | |
| *[List specific configurable parameters for the local system]* |  |  |  |
|  |  |  |  |
| Modified BCP 195 RFC 8996 TLS Secure Transport Connection Parameters | | | |
| *[List specific configurable parameters for the local system]* |  |  |  |
|  |  |  |  |
| <Other Profile> Secure Transport Connection Parameters | | | |
|  |  |  |  |

* + 1. Attribute Confidentiality Details

Table ‎C‑9 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* Table ‎C‑9 “De-identified Elements and Actions”*, 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 ‎C‑9 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).]*

* + 1. Digital Signature Details

*[Describe here the details of any Digital Signature Profile that your product may support. Put "N/A" if none.]*

* + 1. 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.]*

1. 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.]*

* 1. Mapping Between Modality Worklist Instances and MPPS

Table ‎D‑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* Table ‎D‑1 *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* Table ‎D‑1 *to match your product implementation. The entries in the table are meant as an example.]*

Table ‎D‑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* |

1. 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*

*]*