

# **TigerView DICOM and DICONDE Conformance Statement**

## **For DICOM areas:**

**Digital X-ray Image Storage – For Presentation**  
**Digital Intra-oral X-ray Image Storage – For Presentation**  
**Secondary Capture Image Storage**  
**Computed Radiography Image Storage**  
**External Camera Photography Image Storage**  
**Ultrasound Image Storage**  
**Remote Storage**  
**Non-Destructive Testing**  
**Modality Worklist**

**Version 9**

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# Introduction

## 0.1 Purpose

This DICOM and DICONDE Conformance Statement refers to the DICOM and DICONDE functionality of the TigerView DICOM Interface. TigerView is a software imaging application owned and authored by Televere Systems.

## 0.2 Scope

This Conformance Statement refers to TigerView software version 7.0 or higher.

## 0.3 Abbreviations

AE	Application Entity
DICOM	Digital Imaging and Communications in Medicine
DICONDE	Digital Imaging and Communications in Non-Destructive Testing
FSC	File-Set Creator
FSR	File-Set Reader
FSU	File-Set Updater
IOD	DICOM Information Object Definition
MPPS	Modality Performed Procedure Step
MSPS	Modality Scheduled Procedure Step
SC	Secondary Capture
SCP	Service Class Provider
SCU	Service Class User
SOP	DICOM Service-Object Pair
TCP/IP	Transmission Control Protocol/Internet Protocol
UID	Unique Identifier, a string unique in the entire network

### 0.3.1 Modality Abbreviations

CR	Computed Radiography
DX	Digital Radiography
HC	Hard Copy
IO	Intra-oral Radiography
PX	Panoramic X-ray
SC	Secondary Capture
US	Ultrasound
XC	External Camera Photography

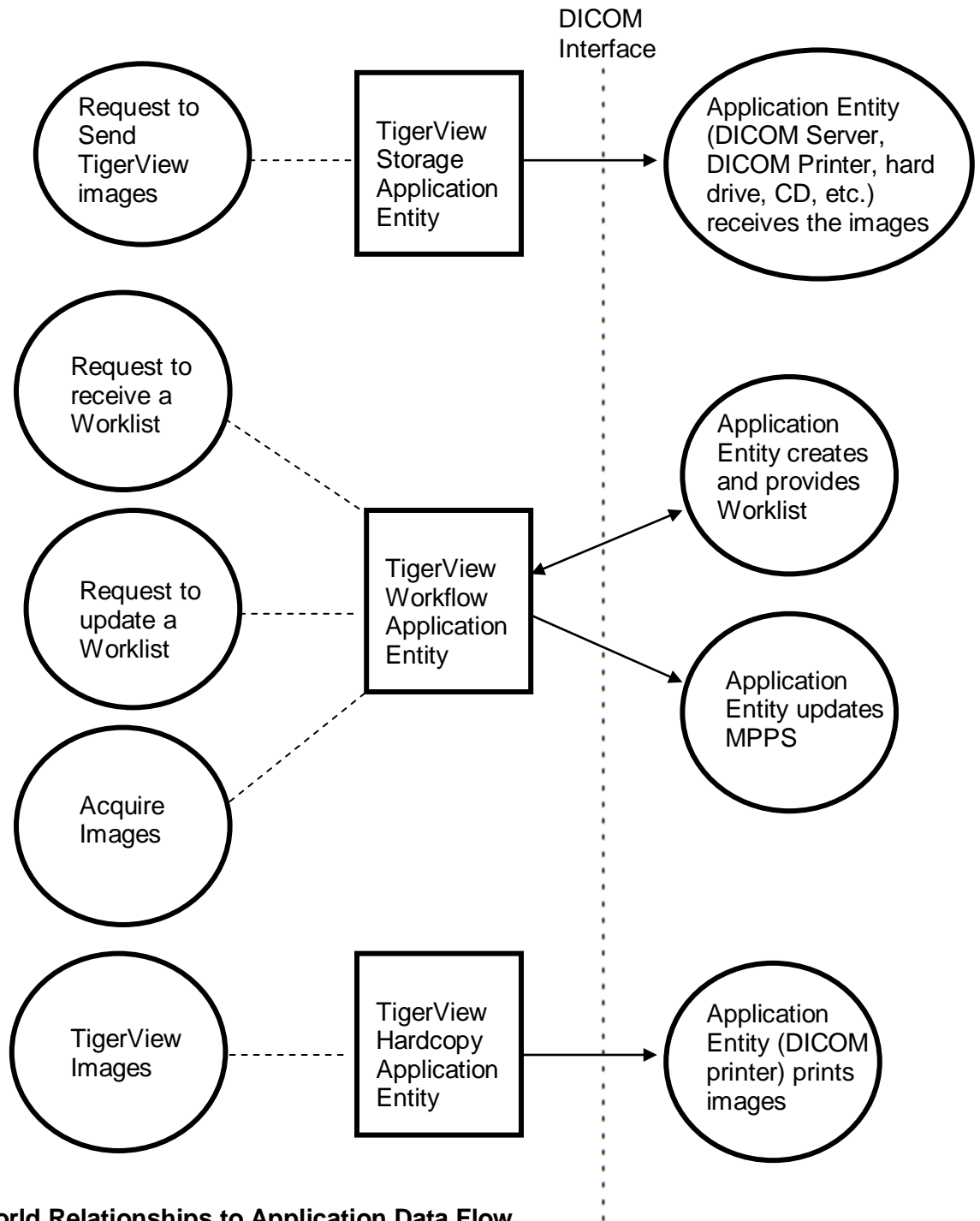
## 0.4 References

Digital Imaging and Communications in Medicine (DICOM) 3, NEMA PS 3.1-16, 2015  
ADA SCDI WG 12.1 Report October 2003

# 1 Implementation Model

## 1.1 Application Data Flow Diagram

The TigerView application converts images into DICOM images and passes them to the TigerView DICOM/DICONDE Interface. The TigerView DICOM/DICONDE Interface uses an existing TCP/IP connection to send the DICOM images to DICOM/DICONDE removable media, DICOM/DICONDE servers, DICOM printers, etc. The TigerView application interfaces with DICOM Modality Worklist servers to obtain and update the worklist.



**Figure 1-1 Real-World Relationships to Application Data Flow**

The TigerView application, acting as an FSR or FSC, reads in SOP instances selected by the user from Removable Media, a local hard drive, or a digital device when the **Import or Save button** in TigerView is clicked. The TigerView application will only display files that match the supported SOP Classes in the supported Application Profiles.

The TigerView application, acting as a FSC, creates a new DICOM file-set on Removable Media, a local hard drive, remote DICOM server, etc. when the **Export button** in TigerView is clicked.

The TigerView application, acting as an FSU, updates the DICOMDIR file on the Removable Media or local hard drive to reflect additions to, or deletions of, current SOP instances on the media. The DICOMDIR file will contain the Directory Records corresponding to the information Objects in the File-set.

The TigerView application can send a **C-FIND** request to get Modality Worklist information from an SCP. The TigerView application can send an **N-Set** request to update the SCP's Modality Worklist.

## 1.2 Functional Definition of Application Entities

There is only one Application Entity: TigerView.

The TigerView Application can perform these functions:

- It can **initialize** a piece of removable media then write a new DICOM File-set onto the media;
- It can **update** a piece of removable media by adding new SOP instances to an already existing DICOM File-set;
- It can **copy** SOP instances from removable media or a remote modality worklist server onto local storage
- It can **copy** SOP instances to a remote storage location (a DICOM server, printer or modality worklist)

### 1.2.1 Media Roles and Operation Supported

The TigerView Application will act as **File-set Creator, File-set Reader, File-set Updater, and Service Class User**. The table below lists the operations supported by these roles. FSC and FSU functions are identical except that FSC will be used when no DICOMDIR exists.

## 1.3 Sequencing Requirements

The updating function can only be performed on a piece of media that already has a DICOM File-set created. There are no other sequencing requirements.

## 2 Application Entity Specifications

TigerView's Export and Send functions provide standard conformance to the DICOM Interchange Option of the Media Storage Service Class. The Application Profiles and roles are listed in Tables 2.1-1 and 2.2-1.

### 2.1 Import and Export Specifications

The Application Profiles and roles are listed in Table 2.1-1. This AE, TigerView, has the ability to support the DICOM Media Roles as listed in the previous section. TigerView is capable of being an **FS-Creator** when the media is un-Initialized, an **FS-Updater** when the media already has a DICOMDIR file and is having file-sets added to or deleted from it, and an **FS-Reader** when copying from removable media to system hard drive, or displaying media contents. The media may be of any format that the Microsoft Windows Operating System supports.

**Table 2.1-1 Application Profiles, Activities, and Roles for Media Update**

Application Profiles Supported	Real World Activity	Role	SC Option
9mm (3 ½") media STD-US-ID-MF-MOD540	Import Button	FSR	Interchange
130mm (5 ¼") media for 2.6GB and 5.2GB MOD media	Export Button	FSC	Interchange
CD DVD BluRay Hard Drive/Memory Stick DICOM Server DICOM Printer Modality Worklist etc.	Export Button	FSU	Interchange

The TigerView Application will query the user before initializing media when a File-set is found on the media and an initialize operation has been requested.

#### 2.1.1 Real-World Activity: Import

The TigerView Application acts as an FSR using the interchange option when requested to copy data to the system hard drive and into the TigerView AE.

##### 2.1.1.1 Application Profiles for FSR: Import

The list of Application Profiles supported by the TigerView Application Entity is in Table 2.1-1. Only the SOP Classes and Transfer syntaxes listed in Table 2.3-1, Abstract and Transfer Syntaxes will be supported for FS-Reader functions. The initial release will only guarantee successful reading of TigerView generated media on the supported media types.

## 2.1.2 Real-World Activity: Export

The TigerView application acts as an FSU/ FSC using the interchange option if the installed media has or has not been initialized and the following command is selected: Export.

The TigerView application acts as an FSC when it takes a user provided list of SOP instances (which may be empty) and writes those SOP instances to the media. If the list is empty, the FSC action will result in the creation of an empty File-set.

The TigerView application acts as an FSU when it copies new SOP Instances onto, or deletes images from, media based on user selection.

### 2.1.2.1 Application Profiles for FSC / FSU: Export

For the list of Application Profiles that invoke the TigerView Application Entity, see Table 2.1-1. Only the SOP Classes and Transfer syntaxes listed in Table 2.3-1, Abstract and Transfer Syntaxes will be supported.

## 2.2 Send Specifications / SCU

The Application Profiles and roles are listed in Table 2.2-1. This AE, TigerView, acting as a Service Class User, sends a DICOM C-Store request when a local image is to be transferred to a remote DICOM server or printer AE (SCP). In addition, this AE, TigerView, acting as a Service Class User, sends a DICOM C-Find request to a DICOM Modality Worklist Server to request worklist information, and then later sends an N-SET request to the same Modality Worklist Server to update the worklist. All communication and message transfers with the remote application are accomplished using the DICOM protocol over a network using the TCP/IP protocol stack. Unsuccessful transfers are reported.

**Table 2.2-1 Application Profiles, Activities, and Roles for Remote Storage**

Application Profiles Supported	Real World Activity	Role
Send images to a remote DICOM server using a C-Store request	Export To DICOM Server using the Send button	SCU
Send to a remote Modality Worklist server using C-FIND and N-SET requests	Retrieves information from a Modality Worklist and then Updates the Modality Worklist using the Acquire window Save button	SCU

### 2.2.1 Real-World Activity: Send or Export To DICOM Server

The TigerView application sends a C-Echo request to a remote DICOM server. If an association is established, TigerView will send a C-STORE request to the remote server



followed by user-selected images. TigerView receives associated replies from the remote server indicating a successful or unsuccessful transfer.

## 2.2.2 Configurable Parameters

The following configurable parameters are held in tables within TigerView: SCU AE title, SCU IP address, SCP AE title, SCP IP address, SCP port number, SCP security, and a time out value.

## 2.3 Abstract and Transfer Syntaxes

The following table contains the standard DICOM IOD, SOP class UID, and Transfer Syntaxes supported by the TigerView application.

**Table 2.3-1 Abstract and Transfer Syntaxes**

Information Object Definition	SOP Class UID	Transfer Syntax	Transfer Syntax UID
Digital X-ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Digital Intra-oral X-ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.3	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
External Camera Photography Image	1.2.840.10008.5.1.4.1.1.77.1.4	Explicit VR Little Endian	1.2.840.10008.1.2.1

<b>Information Object Definition</b>	<b>SOP Class UID</b>	<b>Transfer Syntax</b>	<b>Transfer Syntax UID</b>
Storage		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Hard Copy	1.2.840.10008.5.1.1.14	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Panoramic X-ray	1.2.840.10008.5.1.4.1.1.1.1	Explicit VR Little Endian	1.2.840.10008.1.2.1
		Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline	1.2.840.10008.1.2.4.50
Remote Storage of all IOD's listed above	1.2.840.10008.1.2	Implicit VR Little Endian	1.2.840.10008.1.2
Modality Performed Procedure Step	1.2.840.10008.3.1.2.3.3	Implicit VR Little Endian	1.2.840.10008.1.2

### 3 Standard SOP Specific Conformance to Digital X-ray, Digital X-ray Intra-Oral, Secondary Capture, Computed Radiography, Ultrasound, External Camera Photography, Remote Storage and Modality Worklist SOP Classes

#### IOD Modules

##### Digital X-ray Image

Module Name	Usage	Description
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
General Series	M	General information about the series within a study
Digital X-ray Series	M	Describe and identify the x-ray series
General Equipment	M	Identify and describe the piece of equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
Digital X-ray Anatomy Imaged	M	Describe the anatomic region of interest
Digital X-ray Image	M	Specify an image that has been created by a digital projection radiography imaging device
Digital X-ray Detector	M	Describe the device that acquired the image
VOI LUT	U	Describe the linear transformation of the modality pixel values into pixel values that are meaningful for print, display, etc.
Acquisition Context	M	Describe the conditions present during the acquisition of the image
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

##### Digital Intra-Oral X-ray Image

Module Name	Usage	Description
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
General Series	M	General information about the series within a study
Digital X-ray Series	M	Describe and identify the x-ray series

<b>Module Name</b>	<b>Usage</b>	<b>Description</b>
Intra-oral Series	M	Specify the type of equipment that originally acquired the image data
General Equipment	M	Identify and describe the piece of equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
Digital X-ray Anatomy Imaged	M	Describe the anatomic region of interest
Digital X-ray Image	M	Specify an image that has been created by a digital projection radiography imaging device
Digital X-ray Detector	M	Describe the device that acquired the image
Digital X-ray Positioning	U	Describe the type of image (e.g. Mammographic, Panoramic, Cephalostat, etc
Intra-Oral Image	M	Describe a digital intra-oral x-ray image including its acquisition and positioning
VOI LUT	U	Describes the linear transformation of the modality pixel values into pixel values that are meaningful for print, display, etc.
Acquisition Context	M	Describe the conditions present during the acquisition of the image
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

## Secondary Capture Image

<b>Module Name</b>	<b>Usage</b>	<b>Description</b>
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
General Series	M	General information about the series within a study
General Equipment	U	Identify and describe the piece of equipment that produced a series of composite instances
SC Equipment	M	Identify and describe the piece of secondary capture equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
SC Image	M	Identify and describe a secondary capture image within a particular series
VOI LUT	U	Describes the linear transformation of the modality pixel values into pixel values that are meaningful for print, display, etc.

Module Name	Usage	Description
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

## Computed Radiography Image

Module Name	Usage	Description
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
General Series	M	General information about the series within a study
CR Series	M	Describe and identify the computed radiography series
General Equipment	M	Identify and describe the piece of equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
CR Image	M	Describe a computed radiography image including its acquisition and positioning
VOI LUT	U	Describes the linear transformation of the modality pixel values into pixel values that are meaningful for print, display, etc.
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

## Ultrasound Image

Module Name	Usage	Description
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
Patient Study	U	
General Series	M	General information about the series within a study
General Equipment	M	Identify and describe the piece of equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
US Region Calibration	U	Describe and identify physical information for each region of the image

Module Name	Usage	Description
US Image	M	Describe and identify an image that has been created by an ultrasound imaging device.
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

## External Camera Photography Image

Module Name	Usage	Description
Patient	M	Describe and identify the patient
General Study	M	Describe and identify the study performed on the patient
General Series	M	General information about the series within a study
General Equipment	M	Identify and describe the piece of equipment that produced a series of composite instances
General Image	M	Identify and describe an image within a particular series
Image Pixel	M	Describe the pixel data of the image
Acquisition Context	M	Describe the conditions present during the acquisition of an Image.
VL Image	M	Describe an visible light image including its acquisition and positioning
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.

## Modality Worklist

Module Name	Usage	Description
General Study	M	Describe and identify the study performed on the patient
Imaging Service Request		Identify a request for images.
Patient	M	Describe and identify the patient
Patient Medical		Describe and Identify the patient's medical state and history (additional patient history, medical alerts, allergies, special needs, etc.)
Scheduled Procedure Step		Describe and identify a scheduled procedure.
SOP Common	M	The attributes required for proper functioning and identification of the associated SOP Instances. They do not specify any semantics about the Real-World Object represented by the IOD.
Visix Identification		The attributes relative to identifying a visit.

## Module Elements Supported

Each module that is used by the TigerView Application Entity has a table below that lists the module elements that are supported.

### Patient Module

Attribute Name	Tag	Type	Value	Description	Used By
Patient's Name	0010:0010	2	Name	Patient's full name LastName^FirstName	DX, DX-IO, SC, CR, ES, XC, US, MWL
Patient ID	0010:0020	2	String	Primary ID number or code for this patient	DX, DX-IO, SC, CR, ES, XC, US, MWL
Patient's Birth Date	0010:0030	2	Date String	Birth date of the patient MM/DD/YYYY	DX, DX-IO, SC, CR, ES, XC, US, MWL
Patient's Sex	0010:0040	2	M, F, O	Sex of the patient. MFO "O" for other.	DX, DX-IO, SC, CR, ES, XC, US, MWL
Ethnic Group	0010:2160	3	String	Ethnic group or race of the patient.	US
Patient Species Description	0010,2201	1C	String	The species of the patient	DX, DX- IO, SC, CR, ES, XC
Patient Breed Description	0010,2292	2C	String	The breed of the patient	DX, DX- IO, SC, CR, ES, XC
Responsible Person	0010,2297	2C	String	Name of person with medical decision making authority for the patient.	DX, DX- IO, SC, CR, ES, XC, MWL
Responsible Person Role	0010,2298	1C	String	Relationship of the Responsible Person to the patient.	DX, DX- IO, SC, CR, ES, XC
Responsible Organization	0010,2299	2C	String	Name of the organization with the medical decision making authority for the patient.	DX, DX- IO, SC, CR, ES, XC
Patient Comments	0010:4000	3	Text	User defined comments about the patient.	US, MWL

## Patient Medical Module

Attribute Name	Tag	Type	Value	Description	Used By
Additional Patient History	0010,21B0	3	Long Text	Additional information about the patient's medical history	MWL

## Visit Identification Module Attributes

Attribute Name	Tag	Type	Value	Description	Used By
Institution Name	0008,0080	3	Long String	Institution where the equipment is located	MWL

## General Study Module

Attribute Name	Tag	Type	Value	Description	Used By
Study Instance UID	0020:000D	1	UID	Unique identifier for the study	DX, DX-IO, SC, CR, ES, XC, US, MWL
Study Date	0008:0020	2	Date	Date the study started MM/DD/YYYY	DX, DX-IO, SC, CR, ES, XC, US
Study Time	0008:0030	2	HHMMSS	Time the study started HH:MM:SS:HS	DX, DX-IO, SC, CR, ES, XC, US
Referring Physician's Name	0008:0090	2	String	Name of the patient's referring physician	DX, DX-IO, SC, CR, ES, XC, US
Study ID	0020:0010	2	String	Study identifier	DX, DX-IO, SC, CR, ES, XC, US
Accession Number	0008:0050	2	String	A RIS generated number that identifies the order for the study	DX, DX-IO, SC, CR,



Attribute Name	Tag	Type	Value	Description	Used By
					ES, XC, US
Study Description	0008:1030	3	String	Description or classification of the study	DX, DX-IO, SC, CR, ES, XC, US
Name of Physician(s) reading study	0008:1060	3	String	Name of the physician or physicians reading the study	US

## Patient Study Module

Attribute Name	Tag	Type	Value	Description	Used By
Patient's Age	0010:1010	3	Age String	Age of the patient.	US
Patient's Size	0010:1020	3	Decimal String	Length or size of the patient in meters.	US
Patient's Weight	0010:1030	3	Decimal String	Weight of the patient in kilograms.	US
Admitting Diagnosis Description	0008:1080	3	String	Description of the admitting diagnosis (diagnoses)	DX, DX-IO, SC, CR, ES, XC
Additional Patient History	0010:21B0	3	String	Additional information about the Patient's medical history.	DX, DX-IO, SC, CR, ES, XC
Patient's Sex Neutered	0010:2203	2C	String	<p>Whether or not a procedure has been performed in an effort to render the patient sterile.</p> <p>Required if patient is an animal. May be present otherwise.</p> <p>Enumerated Values: ALTERED - Altered/Neutered UNALTERED - Unaltered/intact</p> <p>Note: If this Attribute is present but has no value then the status is unknown.</p>	DX, DX-IO, SC, CR, ES, XC

## General Series Module

Attribute Name	Tag	Type	Value	Description	Used By
Modality	0008:0060	1	String	Type of equipment that originally acquired the data used to create the images in this series. Ex:	DX, DX-IO, SC, CR,

Attribute Name	Tag	Type	Value	Description	Used By
				CR, PX	ES, XC, US
Series Instance UID	0020:000E	1	UID	Unique identifier for this series	DX, DX-IO, SC, CR, ES, XC, US
Series Number	0020:0011	2	Number	A number that identifies this study	DX, DX-IO, SC, CR, ES, XC, US
Series Date	0008:0021	3	Date	Date the series started	DX, DX-IO, SC, CR, ES, XC, US
Series Time	0008:0031	3	HHMMSS	Time the series started	DX, DX-IO, SC, CR, ES, XC, US
Performing Physician's Name	0008:1050	3	String	Name of the physician(s) administering the series. Ex: LastName^FirstName	DX, DX-IO, SC, CR, ES, XC
Body Part Examined	0018:0015	3	Code String	Description of the part of the body examined. Ex: ANKLE, FOOT, JAW.	CR
Protocol Name	0018:1030	3	String	User-defined description of the conditions under which the Series was performed.	US

### CR Series Module

Attribute Name	Tag	Type	Value	Description	Used By
Body Part Examined	0018:0015	2	Code String	Test description of the part of the body examined. Ex: FOOT, ANKLE, JAW.	CR
View Position	0018:5101	2	Code String	View associated with the patient position. Ex: AP = Anterior/Posterior, LL = Left Lateral	CR

### Digital X-ray Series Module

Attribute Name	Tag	Type	Value	Description	Used By
Modality	0008:0060	2	String	Type of equipment that	DX,

Attribute Name	Tag	Type	Value	Description	Used By
				originally acquired the data used to create the image in this series. Values: DX, PX, IO, MG	DX-IO
Presentation Intent Type	0008:0068	2	String	Identifies the intent of the images that are contained within this Series. Values: FOR PRESENTATION, FOR PROCESSING	DX, DX-IO

### Intra-Oral Series Module

Attribute Name	Tag	Type	Value	Description	Used By
Modality	0008:0060	2	String	Type of equipment that originally acquired the data used to create the images in this Series. Value: IO	DX-IO

### General Equipment Module

Attribute Name	Tag	Type	Value	Description	Used By
Manufacturer	0008:0070	2	String	Manufacturer of the equipment that produced the composite images	DX, DX-IO, SC, CR, ES, XC, US
Institution Name	0008:0080	3	String	Institution where the equipment that produced the composite instances is located	DX, DX-IO, SC, CR, ES, XC, US
Station Name	0008:1010	3	Short String	User defined name identifying the machine that produced the composite instances.	US
Institution Department Name	0008:1040	3	Long String	Department in the institution where the equipment that produced the composite instances is located.	US
Institution Address	0008:0081	3	Short Text	Mailing address of the Institution where the equipment that produced the composite instances is located	DX, DX-IO, SC, CR, ES, XC
Manufacturer's Model Name	0008:1090	3	Long String	Manufacturer's model name of the equipment that produced the composite instances	DX, DX-IO, SC, CR, ES, XC, US
Device Serial	0018:1000	3	Long String	Manufacturer's serial number of	DX,

Attribute Name	Tag	Type	Value	Description	Used By
Number				the equipment that produced the composite instances	DX-IO, SC, CR, ES, XC, US
Software Version	0018:1020	3	Long String	Manufacturer's designation of the software version of the equipment that produced the composite instances	DX, DX-IO, SC, CR, ES, XC, US
Spatial Resolution	0018:1050	3	Decimal String	The inherent limiting resolution in mm of the acquisition equipment for high contrast objects for the data gathering and reconstruction technique chosen. If it is variable across the images of the series, the value at the image center	DX, DX-IO, SC, CR, ES, XC

### SC Equipment Module

Attribute Name	Tag	Type	Value	Description	Used By
Conversion Type	0008:0064	1	Code String	Describes the type of image conversion. Ex: SI = Scanned Image, SD = Scanned Document, DF = Digitized Film	SC
Modality	0008:0060	3	Code String	Source equipment for the image	SC
Secondary Capture Device ID	0018:1010	3	Long String	User defined ID of the device that converted the image	SC
Secondary Capture Device Manufacturer	0018:1016	3	Long String	Manufacturer of the secondary capture device	SC
Secondary Capture Device Manufacturer's Model Name	0018:1018	3	Long String	Manufacturer's model number of the secondary capture device	SC
Secondary Capture Device Software Version(s)	0018:1019	3	Long String	Manufacturer's designation of the name and version of the software that captures the secondary capture image	SC

### General Image Module

Attribute Name	Tag	Type	Value	Description	Used By
Instance Number	0020:0013	2	Integer String	A number that identifies this image	DX, DX-IO, SC, CR, ES, XC,

Attribute Name	Tag	Type	Value	Description	Used By
					US
Patient Orientation	0020:0020	2C	Code String	Patient direction of the rows and columns of the image.	DX, DX-IO, SC, CR, ES, XC, US
Content Date	0008:0023	2C	Date	The date the image pixel data creation started. Required if image is part of a series in which the images are temporally related.	US
Content Time	0008:0033	2C	Time	The time the image pixel data creation started. Required if image is part of a series in which the images are temporally related.	US
Anatomic Region Sequence (folder)	0008:2218	2	Sequence of Items	Sequence that identifies the anatomic region of interest in this image (i.e. external anatomy, surface anatomy, or general region of the body). This anatomic region is placed on the table or bucky for examination. Note: It is strongly recommended that this Attribute be sent with a value, in order to ensure that images may be positioned correctly relative to one another for display. Only a single Item shall be permitted in this Sequence.	DX, DX-IO
Image Type	0008:0008	3	Code String	Image identification characteristics	DX, DX-IO, SC, CR, ES, XC, US
Acquisition Date	0008:0022	3	Date	The date the acquisition of data that resulted in this image started. Format MM/DD/YYYY	DX, DX-IO, SC, CR, ES, XC, US
Acquisition Time	0008:0032	3	Time HHMMSS	The time the acquisition of data that resulted in this image started. Format HH:MM:SS:hS	DX, DX-IO, SC, CR, ES, XC, US
Burned in Annotation	0028:0301	3	Code String	YES or NO. Indicates whether or not annotations identify the patient and image date	DX, DX-IO
Image Comments	0020:4000	3	Long Text	User defined comments about the image	DX, DX-IO, SC, CR,

Attribute Name	Tag	Type	Value	Description	Used By
					ES, XC
Lossy Image Compression	0028:2110	3	Code String	Whether the image has undergone lossy compression. 00 = Yes, 01 = No compression	DX, DX-IO, ES, XC, US
Lossy Image Compression Ratio	0028:2112	3	Decimal String	Describes the approximate lossy compression ratio(s) that have been applied to this image. May be multivalued.	ES, XC
Presentation LUT Shape	2050:0020	3	Code String	Specifies an identity transformation for the Presentation LUT such that the output of all grayscale transformations, if any, are defined to be in P-Values	DX, DX-IO

## Image Pixel Module

Attribute Name	Tag	Type	Value	Description	Used By
Pixel Data	7FE0:0010	1C	Other Byte String	The image. A data stream of the pixel samples that comprise the image.	DX, DX-IO, SC, CR, ES, XC, US
Bits Allocated	0028:0100	1	Unsigned Short binary integer	Number of bits allocated for each pixel sample. Each sample shall have the same number of bits allocated. Bits Allocated (0028,0100) shall be either 1, or a multiple of 8. See PS3.5 for further explanation.	
Bits Stored	0028:0101	1	Unsigned Short binary integer	Number of bits stored for each pixel sample. Each sample shall have the same number of bits stored. See PS3.5 for further explanation.	
Columns	0028:0011	1	Unsigned Short binary integer	Number of columns in the image.	
High Bit	0028:0102	1	Unsigned Short binary integer	Most significant bit for pixel sample data. Each sample shall have the same high bit. High Bit (0028,0102) shall be one less than Bits Stored (0028,0101). See PS3.5 for further explanation.	
Largest Image Pixel Value	0028:0107	3	Unsigned Short binary integer	The maximum actual pixel value encountered in this image.	

Attribute Name	Tag	Type	Value	Description	Used By
Photometric Interpretation	0028:0004	1	Code String	Specifies the intended interpretation of the pixel data. See Section C.7.6.3.1.2 for further explanation.	
Pixel Representation	0028:0103	1	Unsigned Short binary integer	Data representation of the pixel samples. Each sample shall have the same pixel representation.  Enumerated Values: <b>0000H</b> unsigned integer. <b>0001H</b> 2's complement	
Planar Configuration	0028:0006	1C	Unsigned Short binary integer	Indicates whether the pixel data are sent color-by-plane or color-by-pixel. Required if Samples per Pixel (0028,0002) has a value greater than 1. See Section C.7.6.3.1.3 for further explanation.	
Rows	0028:0010	1	Unsigned Short binary integer	Number of rows in the image.	
Samples per Pixel	0028:0002	1	Unsigned Short binary integer	Number of samples (planes) in this image. See Section C.7.6.3.1.1 for further explanation.	
Smallest Image Pixel Value	0028:0106	3	Unsigned Short binary integer	The minimum actual pixel value encountered in this image.	

## SC Image Module

Attribute Name	Tag	Type	Value	Description	Used By
Date of Secondary Capture	0018:1012	3	Date	The date the Secondary Capture Image was captured. Format MM/DD/YYYY	SC
Time of Secondary Capture	0018:1014	3	Time	The time the Secondary Capture Image was captured. Format HH:MM:SS:HS	SC

## CR Image Module

Attribute Name	Tag	Type	Value	Description	Used By
KVP	0018:0060	3	Decimal String	Peak kilo voltage output of the x-ray generator used.	CR
Plate ID	0018:1004	3	Long String	The ID or serial number of the sensing plate upon which the	CR

Attribute Name	Tag	Type	Value	Description	Used By
				image was acquired.	
Distance Source To Detector	0018:1110	3	Decimal String	Distance in mm from source to detector center.	CR
Distance Source To Patient	0018:1111	3	Decimal String	Distance in mm from source to isocenter (center of field of view).	CR
Exposure Time	0018:1150	3	Integer String	Time of x-ray exposure in msec.	CR
X-ray Tube Current	0018:1151	3	Integer String	X-ray Tube Current in mA.	CR
Exposure	0018:1152	3	Integer String	The exposure expressed in mAs, for example calculated from Exposure Time and X-ray Tube Current.	CR
Exposure in uAs	0018:1153	3	Integer String	The exposure expressed in $\mu$ As, for example calculated from Exposure Time and X-ray Tube Current.	CR
Imager Pixel Spacing	0018:1164	3	Decimal String	Physical distance measured at the external surface of the CR plate closest to the radiation source between the center of each pixel. Specified by a numeric pair	CR
Generator Power	0018:1170	3	Integer String	Power in kW to the x-ray generator.	CR
Acquisition Device Processing Description	0018:1400	3	Long String	Describes device-specific processing associated with the image.	CR
Acquisition Device Processing Code	0018:1401	3	Long String	Code representing the device-specific processing associated with the image.	CR
Cassette Orientation	0018:1402	3	Code String	Orientation of cassette, used to properly position the image for display. Either LANDSCAPE or PORTRAIT	CR
Cassette Size	0018:1403	3	Code String	Size of cassette. Ex: 18CMX24CM 8INX10IN 24CMX30CM 10INX12IN	CR
Exposures on Plate	0018:1404	3	Unsigned Short	Total number of x-ray exposures that have been made on the plate.	CR
Relative X-ray Exposure	0018:1405	3	Integer String	Relative x-ray exposure on the plate. Meaning of values is implementation specific. May be used to adjust the dynamic range of the plate digitizer (scanner).	CR
Sensitivity	0018:6000	3	Decimal String	Read out sensitivity.	CR



## Digital X-ray Anatomy Imaged Module

Attribute Name	Tag	Type	Value	Description	Used By
Image Laterality	0020:0062	2	Code String	Laterality of (possibly paired) body part (as described in Anatomic Region Sequence (0008,2218)) examined. Enumerated Values: R = right, L = left, U = unpaired, B = both left and right Note: This Attribute is mandatory, in order to ensure that images may be positioned correctly relative to one another for display. Shall be consistent with any laterality information contained in Primary Anatomic Structure Modifier Sequence (0008,2230), if present. Note: Laterality (0020,0060) is a Series level Attribute and must be the same for all Images in the Series, hence it must be absent.	DX, DX-IO,
Item (folder)	FFFE:E000		Other Byte String		DX, DX-IO
Code Value	0008:0100	1C	Short String	Required if a sequence item is present.	DX, DX-IO
Coding Scheme Designator	0008:0102	1C	Short String	Required if a sequence item is present.	DX, DX-IO
Code Meaning	0008:0104	1C	Long String	Required if a sequence item is present.	DX, DX-IO
Anatomic Region Modifier Sequence	0008:2220	3	Sequence of Items	Sequence that modifies the anatomic region of interest in this image (i.e. prone, supine, decubitus right). May be present only if Anatomic Region Sequence is sent. One or more Items may be included in this Sequence.	DX-IO
Primary Anatomic Structure Sequence (folder)	0008:2228	3	Sequence of Items	Sequence that identifies the primary anatomic structures of interest in this image. One or more Items may be included.	DX-IO
Item (folder)	FFFE:E000		Other Byte String		DX-IO
Code Value	0008:0100	1C	Short String	Required if a sequence item is present.	DX-IO
Coding Scheme Designator	0008:0102	1C	Short String	Required if a sequence item is present.	DX-IO

Attribute Name	Tag	Type	Value	Description	Used By
Code Meaning	0008:0104	1C	Long String	Required if a sequence item is present.	DX-IO

## Digital X-ray Image Module

Attribute Name	Tag	Type	Value	Description	Used By
Image Type	0008:0008	2	Code String	Image identification characteristics.	DX, DX-IO
Pixel Intensity Relationship Sign	0028:1041	2	Signed Short	The sign of the relationship between the Pixel sample values stored in Pixel Data (7FE0,0010) and the X-ray beam intensity. Enumerated Values: 1 = Lower pixel values correspond to less X-ray beam intensity, -1 = Higher pixel values correspond to less X-ray beam intensity	DX, DX-IO
Rescale Intercept	0028:1052	2	Decimal String	The value b in the relationship between stored values (SV) in Pixel Data (7FE0,0010) and the output units specified in Rescale Type (0028,1054). Output units = $m \cdot SV + b$ . Enumerated Value: 0	DX, DX-IO
Rescale Slope	0028:1053	2	Decimal String	m in the equation specified by Rescale Intercept (0028,1052). Enumerated Value: 1	DX, DX-IO
Rescale Type	0028:1054	2	Long String	Specifies the output units of Rescale Slope (0028,1053) and Rescale Intercept (0028,1052). Enumerated Value: US = Unspecified	DX, DX-IO
Presentation LUT Shape	2050:0020	2	Code String	Specifies an identity transformation for the Presentation LUT, other than to account for the value of Photometric Interpretation (0028,0004), such that the output of all grayscale transformations defined in the IOD containing this Module are defined to be P-Values. Enumerated Values: IDENTITY - output is in P-Values - shall be used if Photometric Interpretation (0028,0004) is MONOCHROME2. INVERSE - output after inversion is in P-Values - shall be used if Photometric Interpretation	DX, DX-IO

Attribute Name	Tag	Type	Value	Description	Used By
				(0028,0004) is MONOCHROME1.	
Lossy Image Compression	0028:2110	2	Code String	Specifies whether an Image has undergone lossy compression. Enumerated Values: 00 = Image has NOT been subjected to lossy compression. 01 = Image has been subjected to lossy compression.	DX, DX-IO
Lossy Image Compression Ratio	0028:2112	2	Decimal String	Required if Lossy Compression has been performed on the Image.	SC
Patient Orientation	0020:0020	2	Code String	Patient direction of the rows and columns of the image.	DX, DX-IO, SC
Burned in Annotation	0028:0301	2	Code String	Indicates whether or not image contains sufficient burned in annotation to identify the patient and date the image was acquired. Enumerated Values: YES, NO	DX, DX-IO, SC
Window Center	0028:1050	2	Decimal String	Defines a Window Center for display.	DX, DX-IO, SC
Window Width	0028:1051	2	Decimal String	Window Width for display.	DX, DX-IO, SC

### Digital X-ray Detector Module

Attribute Name	Tag	Type	Value	Description	Used By
Detector Type	0018:7004	2	Code String	The type of detector used to acquire this image. Defined Terms: DIRECT = X-ray photoconductor, SCINTILLATOR = Phosphor used, STORAGE = Storage phosphor, FILM = Scanned film/screen	DX, DX-IO
Detector ID	0018:700A	3	Short String	The ID or serial number of the detector used to acquire this image.	DX, DX-IO
Imager Pixel Spacing	0018:1164	2	Decimal String	Physical distance measured at the front plane of the detector housing between the center of each image pixel specified by a numeric pair - row spacing value(delimiter) column spacing value in mm.	DX, DX-IO

## Digital X-ray Positioning Module

Attribute Name	Tag	Type	Value	Description	Used By
Positioner Type	0018:1508	2	Code String	Defined Terms: CARM, COLUMN, MAMMOGRAPHIC, PANORAMIC, CEPHALOSTAT, RIGID, NONE Notes: 1. The term CARM can apply to any positioner with 2 degrees of freedom of rotation of the X-ray beam about the Imaging Subject. 2. The term COLUMN can apply to any positioner with 1 degree of freedom of rotation of the X-ray beam about the Imaging Subject.	DX, DX-IO

## Intra-Oral Image Module

Attribute Name	Tag	Type	Value	Description	Used By
Positioner Type	0018:1508	1	Code String	Enumerated values: None, Cephalostat, Rigid	DX, DX-IO
Image Laterality	0020:0062	1	Code String	Laterality of the region examined. Enumerated values: R=right, L=left, B=both	DX, DX-IO
Item (folder)	FFFE:E000		Other Byte String		DX-IO
Code Value	0008:0100	1C	Short String	Required if a sequence item is present.	DX-IO,
Coding Scheme Designator	0008:0102	1C	Short String	Required if a sequence item is present.	DX-IO
Code Meaning	0008:0104	1C	Long String	Required if a sequence item is present.	DX-IO
Anatomic Region Modifier Sequence	0008:2220	3	Sequence of Items	Sequence that modifies the anatomic region of interest in this image (i.e. prone, supine, decubitus right). May be present only if Anatomic Region Sequence is sent. One or more Items may be included in this Sequence.	DX-IO
Primary Anatomic Structure Sequence (folder)	008-2228	3	Sequence of Items	Sequence that identifies the primary anatomic structures of interest in this image. One or more Items may be included.	DX-IO

## Visible Light Image Module

Attribute Name	Tag	Type	Value	Description	Used By
Image Type	0008:0008	2	Code String	Image identification characteristics.	ES, XC
Lossy Image Compression	0028:2110	2	Code String	Specifies whether an Image has undergone lossy compression. Enumerated Values: 00 = Image has NOT been subjected to lossy compression. 01 = Image has been subjected to lossy compression.	ES, XC
Pixel Spacing	0028:0030	1C	Decimal String	Physical distance in the patient between the center of each pixel, specified by a numeric pair - adjacent row spacing (delimiter) adjacent column spacing in mm. Required if the image has been calibrated. May be present otherwise	

## US Image

Attribute Name	Tag	Type	Value	Description	Used By
Image Type	0008:0008	3	Code String	Image identification characteristics.	US
Lossy Image Compression	0028:2110	3	Code String	Specifies whether an Image has undergone lossy compression. Enumerated Values: 00 = Image has NOT been subjected to lossy compression. 01 = Image has been subjected to lossy compression.	US
Ultrasound Color Data Present	0028:0014	3	Unsigned Short	This element indicates if any ultrasound color data is present in an image. Enumerated Values: 00 = Ultrasound color data not present in image 01 = Ultrasound color data is present in image.	US
Transducer Type	0018:6031	3	Code String	Defined Terms: SECTOR_PHASED SECTOR_MECH SECTOR_ANNULAR LINEAR CURVED LINEAR SINGLE CRYSTAL	US

Attribute Name	Tag	Type	Value	Description	Used By
				SPLIT XTAL CWD IV_PHASED IV_ROT XTAL IV_ROT MIRROR ENDOCAV_PA ENDOCAV_MECH ENDOCAV_CLA ENDOCAV_AA ENDOCAV_LINEAR VECTOR_PHASED	

## US Region Calibration

Attribute Name	Tag	Type	Value	Description	Used By
Sequence of Ultrasound Regions	0018:6011	1	Sequence of Items	Folder	US
Item	FFFE:E000		Other Byte String	Folder	US
Region Spatial Format	0018:6012	1	Unsigned Short	The spatial organization of the data within the region.	US
Region Data Type	0018:6014	1	Unsigned Short	The type of data within the region.	US
Region Flags	0018:6016	1	Unsigned Long	Flags used for special handling of the region.	US
Region Location Min X 0	0018:6018	1	Unsigned Long	The bounds of a rectangle specifying the location of the region, x0,y0,x1,y1.	US
Region Location Min Y 0	0018:601A	1	Unsigned Long	The bounds of a rectangle specifying the location of the region, x0,y0,x1,y1.	US
Region Location Max X 1	0018:601C	1	Unsigned Long	The bounds of a rectangle specifying the location of the region, x0,y0,x1,y1.	US
Region Location Max Y 1	0018:601E	1	Unsigned Long	The bounds of a rectangle specifying the location of the region, x0,y0,x1,y1.	US
Physical Units X Direction	0018:6024	1	Floating Point Double	The physical units of the dimensions of the region.	US
Physical Units Y Direction	0018:6026	1	Floating Point Double	The physical units of the dimensions of the region.	US
Physical Delta X	0018:602C	1	Floating Point Double	The physical value increments per positive X pixel increment. The units are as specified in the Physical units data element.	US
Physical Delta Y	0018:602E	1	Floating Point Double	The physical value increments per positive X pixel increment. The units are as specified in the Physical	US

Attribute Name	Tag	Type	Value	Description	Used By
				units data element.	

### VOI LUT Module

Attribute Name	Tag	Type	Value	Description	Used By
Window Center	0028:1050	3	Decimal String	Window center for display	DX, DX-IO, SC, CR
Window Width	0028:1051	1C	Decimal String	Window width for display	DX, DX-IO, SC, CR

### Acquisition Context Module

Attribute Name	Tag	Type	Value	Description	Used By
Acquisition Context Sequence	0040:0555	2	Sequence of items	A sequence of repeating items that describes the conditions present during the acquisition of an Image. Zero or more items may be included in this sequence.	DX, DX-IO ES, XC

### SOP Common Module

Attribute Name	Tag	Type	Value	Description	Used By
SOP Class UID	0008:0016		Unique Identifier	Uniquely identifies the SOP Class.	DX, DX-IO, SC, ES, XC, US
SOP Instance UID	0008:0018	1C	Unique Identifier	SOP Instance UID of the contained Image	DX, DX-IO, SC, ES, XC, US
Instance Number	0020:0013	3	Integer String	A number that identifies this composite object instance	DX, DX-IO, SC, CR, ES, XC, US
Coding Scheme Designator	0008:0102	1C	Short String	Identifies the coding scheme in which the code for a term is defined.	MWL
Code Value	0008:0100	1	Short String	Identifies the Coding Scheme	MWL

Attribute Name	Tag	Type	Value	Description	Used By
				when combined with the Coding Scheme Designator (0008:0102) and Coding Scheme Version (0008:0103). Required if a sequence item is present	
Code Meaning	0008:0104	3	Long String	Text which conveys the meaning of the term defined by the combination of Code Value and Coding Scheme Designator. Required if a sequence item is present.	Code Meaning

### Patient Demographic Module

Attribute Name	Tag	Type	Value	Description	Used By
Breed Registration Sequence	0010:2294	1	Other Byte String	This is a two byte field where each bit identifies a version of this File Meta Information header.	DICOMDIR
Patient Breed Code Sequence	0010:2293	1	Unique Identifier	Uniquely identifies the SOP Class associated with the Data Set.	DICOMDIR

### Imaging Service Request Module

Attribute Name	Tag	Type	Value	Description	Used By
Accession Number	0008:0050	2	Short String	A RIS generated number that identifies the order for the Study.	MWL
Requesting Physician	0032:1032	2	Person Name	Name of the physician who requested the study	MWL

### Scheduled Procedure Step Module

Attribute Name	Tag	Type	Value	Description	Used By
Coding Scheme Version	0008:0103	3	Short String	used to identify the version of a coding scheme.	MWL
Scheduled Procedure Step Sequence	0040:0100	1	Sequence of Items	One or more Scheduled Procedure Steps for one Requested Procedure.	MWL
Scheduled Station AE	0040:0001	1	Application	The AE title of the modality on	MWL



Attribute Name	Tag	Type	Value	Description	Used By
Title			Entity	which the Scheduled Procedure Step is scheduled to be performed.	
Scheduled Procedure Step Start Date	0040:0002	1	Date	Date on which the Scheduled Procedure Step is scheduled to start.	MWL
Scheduled Procedure Step Start Time	0040:0003	1	Time	Time at which the Scheduled Procedure Step is scheduled to start.	MWL
Modality	0008:0060	1	Code String	The modality shall be retrieved with Single Value Matching.	MWL
Scheduled Performing Physician Name	0040:0006	2	Person Name	Name of the physician scheduled to administer the Scheduled Procedure Step.	MWL
Scheduled Procedure Step Description	0040:0007	1C	Long String	Institution-generated description or classification of the Scheduled Procedure Step to be performed.	MWL
Scheduled Protocol Code Sequence	0040:0008	1C	Sequence of Items	Sequence describing the Scheduled Protocol following a specified coding scheme. This sequence contains one or more Items.	MWL
Scheduled Procedure Step ID	0040,0009	1	Short String	Identifier that identifies the Scheduled Procedure Step.	MWL
Scheduled Station Name	0040,0010	2	Short String	An institution defined name for the modality on which the Scheduled Procedure Step is scheduled to be performed.	MWL
Scheduled Procedure Step Location	0040:0011	2	Short String	The location at which the Procedure Step is scheduled to be performed.	MWL
Scheduled Procedure Step Status	0040,0020	3	Code String	Defines the state of the Scheduled Procedure Step. Defined Terms: SCHEDULED ARRIVED	MWL

## DICOM Directory (DICOMDIR) Patient Record

Attribute Name	Tag	Type	Value	Description	Used By
File Meta Information Group Length	0002:0000	1		Number of bytes following this File Meta Element (end of the Value field) up to and including the last File Meta Element of the Group 2 File Meta Information	DICOM File Meta Information
Meta File Information Version	0002:0001	1	Other Byte String	This is a two byte field where each bit identifies a version of this File Meta Information header.	DICOM File Meta Information

Attribute Name	Tag	Type	Value	Description	Used By
Media Storage SOP Class UID	0002:0002	1	Unique Identifier	Uniquely identifies the SOP Class associated with the Data Set.	DICOM File Meta Information
Media Storage SOP Instance UID	0002:0003	1	Unique Identifier	Uniquely identifies the SOP Instance associated with the Data Set placed in the file and following the File Meta Information.	DICOM File Meta Information
Implementation Class UID	0002:0012	1	Unique Identifier	Uniquely identifies the implementation which wrote this file and its content.	DICOM File Meta Information
Implementation Version Name	0002:0013	3	Short String	Identifies a version for an Implementation Class UID (0002,0012) using up to 16 characters.	DICOM File Meta Information
Source Application Entity Title	0002:0016	3	Application Entity	The DICOM Application Entity (AE) Title of the AE which wrote this file's content (or last updated it).	DICOM File Meta Information
File Set ID	0004:1130	2	Code String	User or implementation specific Identifier (up to 16 characters). For definition, see PS 3.10. The File-set ID is intended to be a short human readable label to easily (but not necessarily uniquely) identify a specific File-set.	DICOMDIR
File Set Consistency Flag	0004:1212	1	Unsigned Short	When set, this Flag indicates that an inconsistency within the Directory or between the Directory and the Files of the File-set may exist.	DICOMDIR
Directory Record Sequence (folder)	0004:1220	2	Sequence of Items	Sequence of zero or more repeating Items where each Item contains a Directory Record by including the Directory Elements from (0004,1400) to (0004,1511) and Record selection Keys as defined below (marked with a >). A zero length Value indicates that no Directory Records are contained in the Root Directory Entity.	DICOMDIR
Item (folder)	FFFE:E000		Other Byte String		DICOMDIR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use.	DICOMDIR

Attribute Name	Tag	Type	Value	Description	Used By
				0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DICOMDIR
Patient's Name	0010:0010	2	Person Name	Patient's full name.	DICOMDIR
Patient ID	0010:0020	1	Long String	Primary ID number or code for this patient.	DICOMDIR
Item (folder)	FFFE:E000		Other Byte String		DICOMDIR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use. 0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	DICOMDIR
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DICOMDIR
Study Date	0008:0020	1	Date	The date the study started. Format MM/DD/YYYY	DICOMDIR
Study Time	0008:0030	1	Time	The time the study started. Format: HH:MM:SS:hS	DICOMDIR
Accession Number	0008:0050	2	Short String	A RIS generated number that identifies the order for the study.	DICOMDIR
Study Description	0008:1030	2	Long String	Description or classification of the study.	DICOMDIR
Study Instance UID	0020:000D	1C	Unique Identifier	Unique identifier for the study.	DICOMDIR
Study ID	0020:0010	1	Short String	Study identifier.	DX, DX-IO, SC,

Attribute Name	Tag	Type	Value	Description	Used By
					CR
Item (folder)	FFFE:E000		Other Byte String		DX, DX-IO, SC, CR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use. 0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	DX, DX-IO, SC, CR
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DX, DX-IO, SC, CR
Modality	0008:0060	1	Code String	Type of equipment that originally acquired the data used to create the images in this series.	DX, DX-IO, SC, CR
Series Instance UID	0020:000E	1	Unique Identifier	Unique identifier for this series.	
Series Number	0020:0011	2	Integer String	A number that identifies this series.	
Item (folder)	FFFE:E000		Other Byte String		DX, DX-IO, SC, CR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use. 0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	DX, DX-IO, SC, CR
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DX, DX-IO, SC, CR

Attribute Name	Tag	Type	Value	Description	Used By
Study Date	0008:0020	1	Date	The date the study started. Format MM/DD/YYYY	DICOMDIR
Study Time	0008:0030	1	Time	The time the study started. Format: HH:MM:SS:hS	DICOMDIR
Accession Number	0008:0050	2	Short String	A RIS generated number that identifies the order for the study.	DICOMDIR
Study Description	0008:1030	2	Long String	Description or classification of the study.	DICOMDIR
Study Instance UID	0020:000D	1C	Unique Identifier	Unique identifier for the study.	DICOMDIR
Study ID	0020:0010	1	Short String	Study identifier.	DICOMDIR
Item (folder)	FFFE:E000		Other Byte String		DICOMDIR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use. 0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	DICOMDIR
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DICOMDIR
Modality	0008:0060	1	Code String	Type of equipment that originally acquired the data used to create the images in this series.	DICOMDIR
Series Instance UID	0020:000E	1	Unique Identifier	Unique identifier for this series.	DICOMDIR
Series Number	0020:0011	2	Integer String	A number that identifies this series.	DICOMDIR
Item (folder)	FFFE:E000	1C	Other Byte String		DICOMDIR
Record In Use Flag	0004:1410	1C	Unsigned Short	This flag facilitates the deletion of referenced files. Enumerated Values: FFFFH = record is in use. 0000H = record is inactive. Required if the Directory Record Sequence (0004,1220) is not zero length.	DICOMDIR

Attribute Name	Tag	Type	Value	Description	Used By
Directory Record Type	0004:1430	1C	Code String	Defines a specialized type of Directory Record by reference to its position in the Media Storage Directory Information Model Required if the Directory Record Sequence (0004,1220) is not zero length. Ex: PATIENT, STUDY, SERIES, IMAGE	DICOMDIR
Modality	0008:0060	1	Code String	Type of equipment that originally acquired the data used to create the images in this series.	DICOMDIR
Series Instance UID	0020:000E	1	Unique Identifier	Unique identifier for this series.	DICOMDIR
Series Number	0020:0011	2	Integer String	A number that identifies this series.	DICOMDIR

## 3 Communication Profiles

### **3.1 Supported Communication Stacks**

The TCP/IP Network Communication protocol as defined in part 8 of the DICOM standard is supported.

### **3.2 TCP/IP Stack**

TCP/IP + Ethernet

### **3.3 Point-to-Point Stack**

Not supported

## 4 Extensions, Specializations, Privatizations of SOP Classes and Transfer Syntaxes

None



## 5 Configuration

The ADA requests that CD-R and DVD-RAM formats be used as outlined in PS 3.12 Annex F and Annex J of the DICOM Conformance Statement.

## 6 Character Sets

Only SOP Instances containing the DICOM default character set as defined in PS 3.5 will be supported by the TigerView DICOM Interface.

6/5/17