DICOM Conformance Statement

iSite PACS 3.3

CREF4.09-61
2008 Apr 30

Philips Healthcare Informatics, Inc.
Radiology Informatics

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Table of Contents

1 Introduction

Philips iSite PACS is a medical image and information distribution system designed for integration into a medical institution's existing healthcare network. The product utilizes the medical industry standard DICOM 3.0 protocol to exchange information with other DICOM compliant devices on the network. The primary use of the DICOM protocol within the iSite PACS product is for local and remote storage of images, remote printing of images, remote query of image storage related information and local query of modality worklist information.

2 Abbreviations and Symbols

Frequently used abbreviations or acronyms in this document are defined in the table below. All other abbreviations are defined at its first use in this document by the abbreviation followed by its full meaning enclosed in parentheses. For example: CORBA (Common Object Request Broker Architecture). Terms must be listed in the English alphabetical order.

Term	Meaning
AE	Application Entity
API	Application Programming Interface
CT	Computed Tomography
DICOM	Digital Imaging and Communications in Medicine
HIS	Hospital Information System
RIS	Radiology Information System
MR	Magnetic Resonance
MWS	Modality Worklist Server
PDU	Protocol Data Unit
QRSCP	Query/Retrieve Service Class Provider
RLE	Run Length Encoded
RT	Radiotherapy
SCP	Service Class Provider
SCU	Service Class User
SOP	Service Object Pair
TCP/IP	Transmission Control Protocol/Internet Protocol

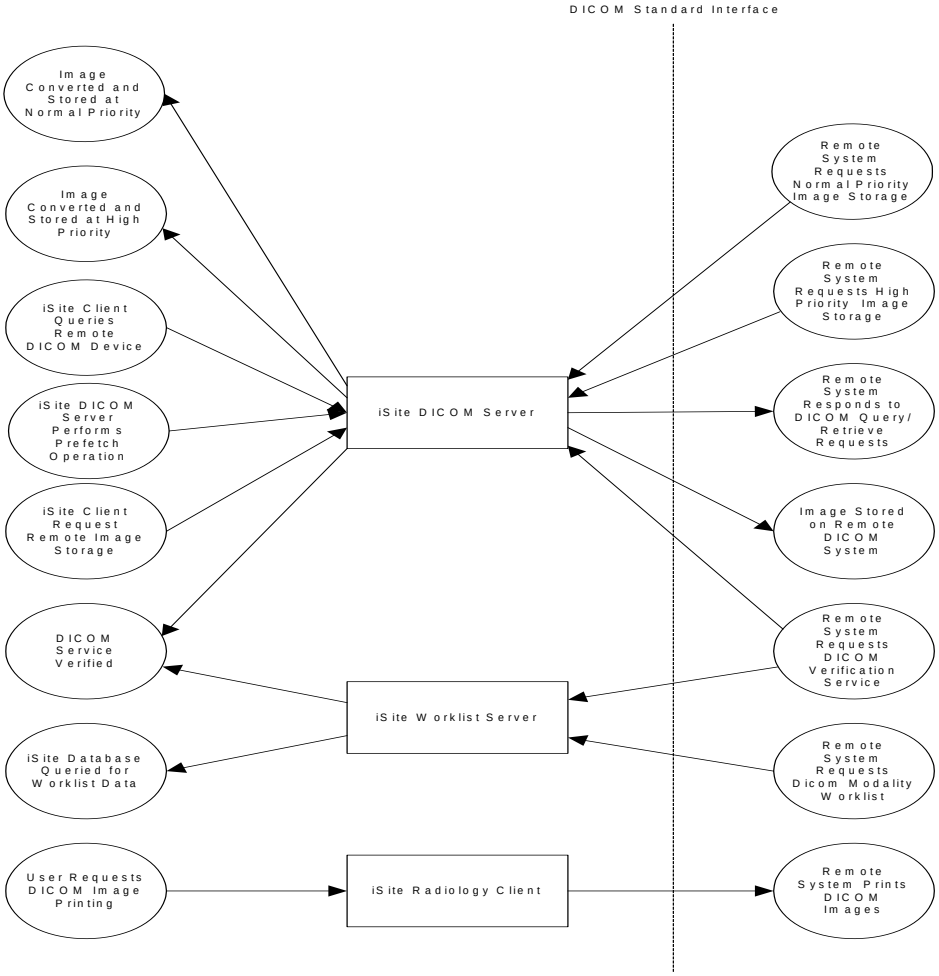
Term	Meaning
UID	Unique Identifier
VR	Value Representation

3 Implementation Model

The iSite PACS system consists of integrated client and server applications within the Philips product line. This system provides DICOM compliant interfaces for Storage, Verification, Query/Retrieve, Printing and Modality Worklist services.

3.1 Application Data Flow Diagram

The iSite PACS DICOM Server, iSite PACS Worklist Server, and iSite Radiology Client Application Entities are all integrated parts of the iSite PACS product.



3.2 Functional Definitions of AEs

The iSite PACS DICOM Server can both initiate and receive DICOM association requests. It runs as a Windows 2000 Server service and will automatically be started as part of the operating system. Once started, the iSite PACS DICOM Server will wait for another application to connect to its DICOM Storage service at the presentation address configured for it's high and low priority Application Entity Titles. iSite PACS client applications also have the ability to initiate DICOM associations by the iSite PACS DICOM Server to remote DICOM devices for Storage and Query/Retrieve services.

The iSite PACS Worklist Server runs as a Windows 2000 Server service and will be automatically started as part of the operating system. Once started, the iSite PACS Worklist Server will wait for another application to connect to it DICOM Modality Worklist service at the presentation address configured.

The iSite Radiology Client will initiate DICOM associations for DICOM Printing services on an as needed basis dependent upon interactive requests from users of the system.

3.3 Sequencing of Real-World Activities

Not Applicable.

4 AE Specifications

4.1 iSite PACS DICOM Server AE Specification

The iSite PACS DICOM Server AE provides standard conformance to the following DICOM V3.0 SOP class in the roles specified:

Table 1: iSite PACS DICOM Server AE Standard Conformance

SOP Class Name	SOP Class UID	Role
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	SCU, SCP
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	SCU, SCP
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	SCU, SCP
Secondary Image Capture Storage	1.2.840.10008.5.1.4.1.1.7	SCU, SCP
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	SCU, SCP
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	SCU, SCP
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	SCU, SCP
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	SCU, SCP
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	SCU, SCP
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	SCU, SCP

SOP Class Name	SOP Class UID	Role
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	SCU, SCP
Digital X-Ray Image Storage – for processing	1.2.840.10008.5.1.4.1.1.1.1.1	SCU, SCP
Digital X-Ray Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.1	SCU, SCP
Digital Mammography Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.2	SCU, SCP
Digital Mammography X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	SCU, SCP
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	SCU, SCP
Multi-frame True Color Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.4	SCU, SCP
Ultrasound Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	SCU, SCP
Ultrasound Multi-frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	SCU, SCP
Patient Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.1.1	SCU, SCP
Patient Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.1.2	SCU, SCP
Study Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.2.1	SCU, SCP
Study Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.2.2	SCU, SCP
Patient/Study Only Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.3.1	SCU, SCP
Patient/Study Only Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.3.2	SCU, SCP

4.1.1 Association Establishment Policies

4.1.1.1 General

The iSite PACS DICOM Server application will request associations and accept associations for DICOM Storage and Query/Retrieve. The iSite PACS DICOM Server application supports a maximum PDU size of 63KB.

4.1.1.2 Number of Associations

The iSite PACS DICOM Server application supports the initiation of a configurable number of simultaneous associations. The default is “3” for Storage Service related transactions and “1” for Query/Retrieve Service related transactions.

The iSite PACS DICOM Server application has no configurable upper limit on the number of simultaneous associations that it will accept. The upper limit of accepted associations is limited by the hardware platform and overall system performance requirements.

4.1.1.3 Asynchronous Nature

The iSite PACS DICOM Server application does not support negotiation of multiple outstanding transactions.

4.1.1.4 Implementation Identifying Information

The iSite PACS DICOM Server uses the following implementation identifying information.

Table 2: iSite PACS DICOM Server Implementation Identifying Information

Implementation Class UID	2.16.840.1.114151.100.1.1

4.1.2 Association Initiation by Real-World Activity

4.1.2.1 Real World Activity – iSite PACS Client Queries Remote DICOM Device

4.1.2.1.1 Associated Real-World Activity

iSite PACS client applications use the iQuery tool of the iSite PACS DICOM Server to initiate and manage DICOM associations with remote Application Entities that support the DICOM Query/Retrieve Service as a Service Class Provider. The iQuery tool allows iSite PACS client applications to interact with the iSite PACS DICOM Server via a proprietary interface. The iSite PACS DICOM Server's iQuery tool is an interactive end-user application and will generate DICOM transactions based upon end-user initiated activities.

4.1.2.1.2 Proposed Presentation Contexts

Table 3: Proposed Presentation Contexts for iSite PACS DICOM Server and Real-World Activity – iSite PACS Client Queries Remote DICOM Device.

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Patient Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Patient Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.1.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None
Study Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.2.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None
Study Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.2.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None
Patient/Study Only Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.3.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None
Patient/Study Only Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.3.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCU	None

4.1.2.1.3 SOP Specific Conformance Statement for SOP Class 'Patient Root Query/Retrieve Information Model - FIND'

All DICOM attributes specified as valid keys for C-FIND messages are legal for Philips iSite PACS Server query keys as well. In practice, the set actually used is defined by client-side requests so only a pertinent subset would be used. Table 4 lists the essential tags that Philips iSite PACS Server will expect any Query/Retrieve SCP to support for the Patient Root Information Model.

Table 4: DICOM data elements supported for SOP Class 'Patient Root Query/Retrieve Information Model - FIND'

Level	Description	Tag	Type
Patient	Patient's Name	(0010,0010)	R
Patient	Patient ID	(0010,0020)	U
Study	Study ID	(0020,0010)	R
Study	Study Instance UID	(0020,000D)	U
Study	Study Date	(0020,0020)	R
Study	Study Time	(0020,0030)	R

Level	Description	Tag	Type
Study	Accession Number	(0008,0050)	R
Study	Referring Physician	(0008,0090)	O
Study	Study Description	(0008,1030)	O
Series	Modality	(0008,0060)	R
Series	Series Number	(0020,0011)	R
Series	Body Part Examined	(0018,0015)	O
Series	Series Instance UID	(0020,000E)	U

4.1.2.1.4 SOP Specific Conformance Statement for SOP Class "Study Root Query/Retrieve Information Model – FIND"

All DICOM attributes specified as valid keys for C-FIND messages are legal for Philips iSite PACS Server query keys as well. In practice, the set actually used is defined by client-side requests so only a pertinent subset would be used. Table 5 lists the essential tags that Philips iSite PACS Server will expect any Query/Retrieve SCP to support for the Study Root Information Model.

Table 5: DICOM data elements supported for SOP Class 'Study Root Query/Retrieve Information Model - FIND'

Level	Description	Tag	Type
Study	Patient's Name	(0010,0010)	R
Study	Patient ID	(0010,0020)	U
Study	Study ID	(0020,0010)	R
Study	Study Instance UID	(0020,000D)	U
Study	Study Date	(0020,0020)	R
Study	Study Time	(0020,0030)	R
Study	Accession Number	(0008,0050)	R
Study	Referring Physician	(0008,0090)	O
Study	Study Description	(0008,1030)	O
Series	Modality	(0008,0060)	R
Series	Series Number	(0020,0011)	R
Series	Body Part Examined	(0018,0015)	O
Series	Series Instance UID	(0020,000E)	U

4.1.2.1.5 SOP Specific Conformance Statement for SOP Class "Patient/Study Only Query/Retrieve Information Model – FIND"

All DICOM attributes specified as valid keys for C-FIND messages are legal for Philips iSite PACS Server query keys as well. In practice the set actually used is defined by client-side requests so only a pertinent subset would be used. Table 6 lists the essential tags that Philips iSite PACS Server will expect any Query/Retrieve SCP to support for the Patient/Study Only Information Model.

Table 6: DICOM data elements supported for SOP Class 'Patient Study Only Query/Retrieve Information Model - FIND'

Level	Description	Tag	Type
Patient	Patient's Name	(0010,0010)	R
Patient	Patient ID	(0010,0020)	U
Study	Study Date	(0020,0020)	R
Study	Study Time	(0020,0030)	R
Study	Accession Number	(0008,0050)	R
Study	Referring Physician	(0008,0090)	O
Study	Study Description	(0008,1030)	O
Study	Study ID	(0020,0010)	R
Study	Study Instance UID	(0020,000D)	U

4.1.2.2 Real World Activity – iSite PACS DICOM Server Performs Prefetch Operation

4.1.2.2.1 Associated Real-World Activity

This real world activity is implemented using the iQuery tool of the iSite PACS DICOM Server that is described in detail in Table 3. Please refer to that section for DICOM specific conformance.

The iSite PACS Server will initiate associations for the DICOM Query/Retrieve Service in order to perform prefetch operations. Inbound information received from Order and Scheduling systems will trigger prefetch activities within the iSite PACS DICOM Server. Prefetch activities will cause the iSite PACS DICOM Server to query for and retrieve older DICOM studies from a remote DICOM entity which are determined to be relative to the currently ordered and scheduled studies.

4.1.2.3 Real World Activity – iSite PACS Client Requests Remote Image Storage

4.1.2.3.1 Associated Real-World Activity

iSite PACS client applications use the iExport tool of the iSite PACS DICOM Server to initiate and manage DICOM associations with remote Application Entities that support the DICOM Storage Service as a Service Class Provider. The iExport tool allows iSite PACS client applications to interact with the iSite PACS DICOM Server via a proprietary interface. The

iSite PACS DICOM Server's iExport tool is an interactive end-user application and will generate DICOM transactions based upon end-user initiated activities.

4.1.2.3.2 Proposed Presentation Contexts

Table 7: Proposed Presentation Contexts for iSite PACS DICOM Server and Real-World Activity – iSite PACS Client Requests Remote Image Storage

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Secondary Image Capture Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital X-Ray Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital X-Ray Image Storage – for processing	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Digital Mammography Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital Mammography Image Storage – for processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Multi-frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Multi-frame True Color Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

4.1.3 Association Acceptance Policy

4.1.3.1 Real World Activity – Remote System Requests Normal Priority Image Storage

4.1.3.1.1 Associated Real-World Activity

The iSite PACS DICOM Server will accept DICOM Storage Service association request that are initiated by remote DICOM entities. The iSite PACS DICOM Server will process the stored DICOM images and make them available for access by iSite PACS client applications.

4.1.3.1.2 Accepted Presentation Contexts

Table 8: Accepted Presentation Contexts for iSite PACS DICOM Server and Real-World Activity – Remote System Request Normal Priority Image Storage

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Secondary Image Capture Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital X-Ray Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital X-Ray Image Storage – for processing	1.2.840.10008.5.1.4.1.1.1.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital Mammography Image Storage – for presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Digital Mammography Image Storage – for processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Ultrasound Multi-frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Multi-frame True Color Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None
		RLE Transfer Syntax	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
		JPEG Baseline Coding Process 1 Transfer Syntax	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, (Process 14 [Selection Value 1]):	1.2.840.10008.1.2.4.70	SCP	None
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

4.1.3.1.3 SOP Specific Conformance Statement for Storage SOP Classes

The iSite PACS DICOM Server conforms to the SOPs of the Storage Service Class listed in Table 5 at Level 2 (Full). No elements are discarded, but the following demographic elements may be modified.

Table 9: DICOM Data Elements that may be Modified by the iSite PACS DICOM Server

Name	(Group, Element)
Accession Number	(0x0008, 0x0050)
Referring Physician	(0x0008, 0x0090)
Procedure Sequence	(0x0008, 0x1032)
> Code Value	(0x0008, 0x0100)
> Code Meaning	(0x0008, 0x0104)

Name	(Group, Element)
Patient Name	(0x0010, 0x0010)
Patient ID	(0x0010, 0x0020)
Patient Birth Date	(0x0010, 0x0030)
Patient Sex	(0x0010, 0x0040)
Requesting Physician	(0x0032, 0x1032)

Modification of data elements is initiated either by processing of manual edits initiated by end users of the system or automatic edits initiated by information received from ADT and Order Entry systems (HIS/RIS).

Depending upon the system configuration, the iSite PACS DICOM Server application either performs “lifetime” persistence for the Images received or manages an auto-deleted cache of the most recently active image studies. In the cache storage mode, images received will be deleted when the server disk space becomes full. Deletion will be performed based on a “least accessed patient” strategy. If an iSite PACS client has accessed any part of a patient’s studies, all images associated with that patient have a lower probability of being deleted.

The iSite PACS Server application entity returns the status code of “0” if the receipt of a C-STORE message was successful; otherwise it returns one of the following codes:

Table 10: Returned Codes

Code	Standard Meaning	Implementation Specific Meaning
0000	Success	Message was received successfully
A700	Out of Resources	There is insufficient storage in the server. Try again later.
A800	Illegal SOP Class	SOP class that was not negotiated was received.
A900	Data mismatch	Missing type 1 or type 2 data element was detected or other incorrect encoding in the DICOM data stream.
C000	Cannot understand	Part of the data could not be parsed. This usually indicates a serious DICOM encoding error in the SCU implementation or data stream corruption.

4.1.3.1.4 Presentation Context Acceptance Criterion

The iSite PACS DICOM Server will accept all presentation contexts that are combinations of supported SOP Classes and Transfer Syntaxes as presented in Table 5.

4.1.3.1.5 Transfer Syntax Selection Policies

The iSite PACS DICOM Server will examine the Transfer Syntaxes for a given proposed Presentation Context in the order that they are presented in the Association Request. The first proposed Transfer Syntax that matches a support Transfer Syntax will be accepted for each supported proposed Presentation Context.

4.1.3.2 Real World Activity – Remote System Requests High Priority Image Storage

4.1.3.2.1 Associated Real-World Activity

The DICOM specific conformance related to this real world activity is identical to the DICOM conformance section. Please refer to that section for DICOM conformance details.

Remote DICOM SCUs are able to request high priority processing of DICOM requests by negotiating their DICOM associations with the configurable high priority Application Entity Tile of the iSite PACS DICOM Server. High priority DICOM storage requests are processed ahead of other pending requests for normal priority storage.

4.1.3.3 Real World Activity – Remote System Requests DICOM Verification Service

4.1.3.3.1 Associated Real-World Activity

The iSite PACS DICOM Server will accept and process request for Verification Service that are initiated by remote DICOM entities.

4.1.3.3.2 Accepted Presentation Contexts

Table 11: Accepted Presentation Contexts for iSite PACS DICOM Server and Real-World Activity – Remote System Requests DICOM Verification Service

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Verification	1.2.840.10008.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

4.1.3.3.3 Presentation Context Acceptance Criterion

The iSite PACS DICOM Server will only accept presentation contexts for the Verification Service that request the Verification SOP Class with Implicit VR Little Endian Transfer Syntax.

4.1.3.3.4 Transfer Syntax Selection Policies

The iSite PACS DICOM Server will always select the Implicit VR Little Endian Transfer Syntax for proposed presentation contexts for the Verification Service.

4.1.4 iSite PACS DICOM QRSCP AE Specification

The QRSCP AE provides Standard conformance to the following DICOM V3.0 SOP Classes as a Query/Retrieve SCP.

Table 12: SOP Class UID and Name

SOP Class UID	SOP Class Name
1.2.840.10008.5.1.4.1.2.1.1	Patient Root Query/Retrieve Information Model – Find*

SOP Class UID	SOP Class Name
1.2.840.10008.5.1.4.1.2.1.2	Patient Root Query/Retrieve Information Model – Move*
1.2.840.10008.5.1.4.1.2.2.1	Study Root Query/Retrieve Information Model – Find*
1.2.840.10008.5.1.4.1.2.2.2	Study Root Query/Retrieve Information Model – Move*
1.2.840.10008.5.1.4.1.2.3.1	Patient/Study Only Query/Retrieve Information Model - Find
1.2.840.10008.5.1.4.1.2.3.2	Patient/Study Only Query/Retrieve Information Model – Move

*Model is partially supported. Requests at SERIES or COMPONENT level will not be serviced.

4.1.5 Association Establishment Policies

4.1.5.1 General

The QRSCP will listen for an association as an SCP for the Query/Retrieve SOP Class. The default maximum PDU size is 64512.

4.1.5.2 Number of Associations

The number of threads available to process associations is configurable, and defaults to five (5) threads. The number of simultaneous associations that can be serviced is unlimited, but performance will degrade proportionally to the number of simultaneous associations and the average activity per association. Higher performance can be achieved by increasing the number of processors, threads, and memory.

4.1.5.3 Asynchronous Nature

Multiple transactions on a single association are not supported.

4.1.5.4 Implementation Identifying Information

The iSite PACS QRSCP uses the following implementation identifying information.

Table 13: iSite PACS QRSCP Implementation Identifying Information

Implementation Class UID	2.16.840.1.114151.100.1.1

4.1.6 Association Initiation by Real-World Activity

The QRSCP does not initiate associations.

4.1.6.1 Association acceptance policy

QRSCP accepts associations for the Query/Retrieve Services.

4.1.6.2 Real-world activity for Find and Move commands

Associations are accepted for the Query/Retrieve service. An accepted association is only closed after an error or when the client closes the association.

4.1.6.2.1 Associated Real-World Activity

After an association has been accepted, the QRSCP will wait for messages appropriate for the Query/Retrieve Service. When valid messages are read from the association, they will be processed, and any required responses will be sent back on the association.

Table 14: Presentation context table

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name**	**UID**		
Patient Root Query/Retrieve Information Model - Find	1.2.840.10008.5.1.4.1.2.1.1	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No
Patient Root Query/Retrieve Information Model - Move	1.2.840.10008.5.1.4.1.2.1.2	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No
Study Root Query/Retrieve Information Model - Find	1.2.840.10008.5.1.4.1.2.2.1	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No
Study Root Query/Retrieve Information Model - Move	1.2.840.10008.5.1.4.1.2.2.2	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No
Patient/Study Only Query/Retrieve Information Model – Find	1.2.840.10008.5.1.4.1.2.3.1	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No
Patient/Study Only Query/Retrieve Information Model – Move	1.2.840.10008.5.1.4.1.2.3.2	Explicit VR Little Endian Explicit VR Big Endian Implicit VR Little Endian	1.2.840.10008.1.2.1 1.2.840.10008.1.2.2 1.2.840.10008.1.2	SCP	No

4.1.6.2.2 SOP Specific Conformance for Patient Root Query/Retrieve Information Model

Partial behavior of the Patient Root SOP Classes is supported as an SCP. No queries will be supported at IMAGE or COMPONENT level. Only C-FIND and C-MOVE related requests are handled, and the Priority Service parameter is not used.

4.1.7 C-FIND Conformance

The following optional keys are supported:

Table 15: Optional Key Support:

Level	Tag	Description	Matching Support
PATIENT	(0010,0030)	Patient's Birth Date	Matching/Existence
	(0010,0040)	Patient's Sex	Matching/Existence
STUDY	(0008,0090)	Referring Physician	Matching/Existence
	(0008,0061)	Modalities in Study	Matching/Existence
	(0020,1206)	Num. Study Related Series	Existence
	(0020,1208)	Num. Series Related Instances	Existence

Relational queries are not supported.

Retrieve AE Title attribute (0008,0054) is always returned in the Response Identifier.

4.1.8 C-MOVE Conformance

The QRSCP does not perform C-STORE operations; an internal protocol is used to trigger these operations on the iSite PACS server AE. The supported Storage Service Class SOP Classes for C-MOVE are the same as those supported by the iSite PACS server AE, and are covered in a separate conformance document.

C-MOVE pending response messages are sent by QRSCP at a configurable interval, and always indicate the number of remaining, successful, failed, or warning sub-operations.

4.1.8.1 Presentation context acceptance criterion for Find and Move commands

All presentation contexts listed in section 2.1.3.1.2 will be accepted.

4.1.8.2 Transfer syntax selection policies for Find and Move commands

Proposed transfer syntaxes are selected in the following order:

Explicit VR Little Endian - 1.2.840.10008.1.2.1

Explicit VR Big Endian – 1.2.840.10008.1.2.2

Implicit VR Little Endian – 1.2.840.10008.1.2

4.1.8.3 SOP Specific Conformance for Study Root Query/Retrieve Information Model

Partial behavior of the Patient Root SOP Classes is supported as an SCP. No queries will be supported at IMAGE or COMPONENT level. Only C-FIND and C-MOVE related requests are handled, and the Priority Service parameter is not used.

4.1.9 C-FIND Conformance

Table 16: Optional Keys Supported

Level	Tag	Description	Matching Support
STUDY	(0010,0030)	Patient's Birth Date	Matching/Existence
	(0010,0040)	Patient's Sex	Matching/Existence
	(0008,0090)	Referring Physician	Matching/Existence
	(0008,0061)	Modalities in Study	Matching/Existence
	(0020,1206)	Num. Study Related Series	Existence
	(0020,1208)	Num. Series Related Instances	Existence

Relational queries are not supported.

Retrieve AE Title attribute (0008,0054) is always returned in the Response Identifier.

4.1.10 C-MOVE Conformance

The QRSCP does not perform C-STORE operations; an internal protocol is used to trigger these operations on the iSite PACS server AE. The supported Storage Service Class SOP Classes for C-MOVE are the same as those supported by the iSite PACS server AE, and are covered in a separate conformance document.

C-MOVE pending response messages are sent by QRSCP at a configurable interval, and always indicate the number of remaining, successful, failed, or warning sub-operations.

4.1.10.1.1 Presentation context acceptance criterion for Find and Move commands

All presentation contexts listed in section 2.1.3.1.2 will be accepted.

4.1.10.1.2 Transfer syntax selection policies for Find and Move commands

Proposed transfer syntaxes are selected in the following order:

1. Explicit VR Little Endian - 1.2.840.10008.1.2.1
2. Explicit VR Big Endian – 1.2.840.10008.1.2.2
3. Implicit VR Little Endian – 1.2.840.10008.1.2

4.1.10.1.3 SOP Specific Conformance for Patient/Study Only Query/Retrieve Information Model

Baseline behavior of the Patient/Study Only SOP Classes is supported as an SCP. Only C-FIND and C-MOVE related requests are handled, and the Priority Service parameter is not used.

4.1.11 C-FIND Conformance

Table 17: Optional Keys Supported

Level	Tag	Description	Matching Support
PATIENT	(0010,0030)	Patient's Birth Date	Matching/Existence
	(0010,0040)	Patient's Sex	Matching/Existence
STUDY	(0008,0090)	Referring Physician	Matching/Existence
	(0008,0061)	Modalities in Study	Matching/Existence
	(0020,1206)	Num. Study Related Series	Existence
	(0020,1208)	Num. Series Related Instances	Existence

Relational queries are not supported.

Retrieve AE Title attribute (0008,0054) is always returned in the Response Identifier.

4.1.12 C-MOVE Conformance

The QRSCP does not perform C-STORE operations; an internal protocol is used to trigger these operations on the iSite PACS server AE. The supported Storage Service Class SOP Classes for C-MOVE are the same as those supported by the iSite PACS server AE, and are covered in a separate conformance document.

C-MOVE pending response messages are sent by QRSCP at a configurable interval, and always indicate the number of remaining, successful, failed, or warning sub-operations.

4.1.12.1.1 Presentation context acceptance criterion for Find and Move commands

All presentation contexts listed in section 2.1.3.1.2 will be accepted.

4.1.12.1.2 Transfer syntax selection policies for Find and Move commands

Proposed transfer syntaxes are selected in the following order:

1. Explicit VR Little Endian - 1.2.840.10008.1.2.1
2. Explicit VR Big Endian – 1.2.840.10008.1.2.2
3. Implicit VR Little Endian – 1.2.840.10008.1.2

4.2 iSite PACS Worklist Server AE Specification

The iSite PACS Worklist Server AE provides standard conformance to the following DICOM V3.0 SOP class in the roles specified:

Table 18: iSite PACS Worklist Server AE Standard Conformance

SOP Class Name	SOP Class UID	Role
Verification	1.2.840.10008.1.1	SCP
Modality Worklist	1.2.840.10008.5.1.4.31	SCP

4.2.1 Association Establishment Policies

4.2.1.1 General

The iSite PACS Worklist Server supports the acceptance of DICOM associations for the DICOM Modality Worklist Service and the DICOM Verification Service. The iSite PACS Worklist Server application supports a maximum PDU size of 30KB with a default of 16KB.

4.2.1.2 Number of Associations

The iSite PACS Worklist Server application has no configurable upper limit on the number of simultaneous associations that it will accept. The upper limit of accepted associations is limited by the hardware platform and overall system performance requirements.

4.2.1.3 Asynchronous Nature

The iSite PACS Worklist Server application does not support negotiation of multiple outstanding transactions.

4.2.1.4 Implementation Identifying Information

The iSite PACS Worklist Server uses the following implementation identifying information.

Table 19: iSite PACS Worklist Server Implementation Identifying Information

Implementation Class UID	1.2.840.113745.1
Version Name	IDX_MrgCOM3_240

4.2.2 Association Initiation by Real-World Activity

The iSite PACS Worklist Server application entity does not initiate DICOM associations.

4.2.3 Association Acceptance Policy

4.2.3.1 Real World Activity – Remote System Request DICOM Modality Worklist

4.2.3.1.1 Associated Real-World Activity

A remote application entity will establish an association with the iSite PACS Worklist Server entity in order to perform DICOM Modality Worklist operations. This activity is generally initiated by an end-user of the remote system interacting with some user interface to generate the requests.

4.2.3.1.2 Accepted Presentation Contexts

Table 20: Accepted Presentation Contexts for iSite PACS Worklist Server and Real-World Activity – Remote System Request DICOM Modality Worklist

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Modality Worklist	1.2.840.10008.5.1.4.31	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian Transfer Syntax	1.2.840.10008.1.2.2	SCP	None

4.2.3.1.3 SOP Specific Conformance to Modality Worklist SOP Class

The iSite PACS Worklist Server (MWS) application entity conforms to the Modality Worklist SOP Class. Supported Matching and Return keys are listed in Table 2. MWS only supports required matching keys and return keys of Types 1, 1C, 2 and 2C. Some of Type 3 return keys are also supported (see table below for the list of supported keys). It means that MWS will only accepts queries based on supported matching keys, any values provided in the return keys will be ignored which may potentially lead to larger sets of returned information.

Table 21: SOP Specific Conformance to Modality Worklist SOP Class

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
SOP Common				
Specific Character Set	(0008,0005)	O	1C	Note: This attribute is omitted from the return data sets because expanded or replacement character sets are not used.
Scheduled Procedure Step				
Scheduled Procedure Step Sequence	(0040,0100)	R	1	The Attributes of the Scheduled Procedure Step shall only be retrieved with Sequence Matching. The Scheduled Procedure Step Sequence shall contain only a single Item.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Scheduled Station AE Title	(0040,0001)	R	1	The Scheduled station AE title shall be retrieved with Single Value Matching only.
>Scheduled Procedure Step Start Date	(0040,0002)	R	1	Scheduled Step Start Date shall be retrieved with Single Value Matching or Range Matching. See remark under Scheduled Procedure Step Start Time(0040,0003).
>Scheduled Procedure Step Start Time	(0040,0003)	R	1	Scheduled Step Start Time shall be retrieved with Single Value Matching or Range Matching. Scheduled Step Start Date and Scheduled Step Start Time are subject to Range Matching. If both keys are specified for Range Matching, e.g. the date range "July5\July 7" and the time range "10am\6pm" specifies the time period starting on July 5, 10am until July 7, 6pm.
>Modality	(0008,0060)	R	1	The Modality shall be retrieved with Single Value Matching.
>Scheduled Performing Physician's Name	(0040,0006)	R	2	Scheduled Performing Physician's Name shall be retrieved with Single Value Matching or Wild Card Matching. Note: Though supported as a required key, using Scheduled Performing Physician Name with value other than '*' will cause returning no information. Imaging Suite does not schedule Performing Physicians for the exams.
>Scheduled Procedure Step Description	(0040,0007)	O	1C	Note: This return attribute is supported as Type 1. Its value always correspond to the value of Requested Procedure Description (0032,1060)
>Scheduled Station Name	(0040,0010)	O	2	
>Scheduled Procedure Step Location	(0040,0011)	O	2	Note: Supported, but will always be returned with zero length

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Scheduled Action Item Code Sequence	(0040,0008)	O	1C	The Scheduled Action Item Code Sequence contains one or more Action Items. Note: This return attribute is supported as Type 1 and contains a single Action Item. Values of its components will always be identical to corresponding values of the Requested Procedure Code Sequence (0032,1064).
>>Code Value	(0008,0100)	O	1C	Required if a Sequence Item is present.
>>Coding Scheme Designator	(0008,0102)	O	1C	Required if a Sequence Item is present.
>>Code Meaning	(0008,0104)	O	3	Note: This Value will always be identical to the one of the Scheduled Procedure Step description (0040,0007)
>Pre-Medication	(0040,0012)	O	2C	Required if Pre-Medication is to be applied to that Scheduled Procedure Step.
>Scheduled Procedure Step ID	(0040,0009)	O	1	Note: Value of this Attribute will always be equal to that of Requested Procedure ID (0040,1001)
>Requested Contrast Agent	(0032,1070)	O	2C	Required if Contrast Media is to be applied to that Scheduled Procedure Step.
>Scheduled Procedure Step Status	(0040,0020)	O	3	Note: Supported, but always returns value “SCHEDULED”
>All other Attributes from the Scheduled Procedure Step Module		O	3	Note: Not Supported
Requested Procedure				
Requested Procedure ID	(0040,1001)	O	1	Note: Value of this Attribute will always be equal to that of Accession Number (0008,0050)
Requested Procedure Description	(0032,1060)	O	1C	Note: This return attribute is supported as Type 1.
Requested Procedure Code Sequence	(0032,1064)	O	1C	Note: This return attribute is supported as Type 1 and contains a single Item

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Code Value	(0008,0100)	O	1C	Required if a Sequence Item is present.
>Coding Scheme Designator	(0008,0102)	O	1C	Required if a Sequence Item is present.
>Code Meaning	(0008,0104)	O	3	
Study Instance UID	(0020,000D)	O	1	
Referenced Study Sequence	(0008,1110)	O	2	Note: Supported, but the Sequence will always be returned without Items in it
>Referenced SOP Class UID	(0008,1150)	O	1C	Required if a Sequence Item is present.
>Referenced SOP Instance UID	(0008,1155)	O	1C	Required if a Sequence Item is present.
Requested Procedure Priority	(0040,1003)	O	2	Note: Supported, but will always be returned with zero length
Patient Transport Arrangements	(0040,1004)	O	2	Note: Supported, but will always be returned with zero length
All other Attributes from the Requested Procedure Module		O	3	Note: Not Supported
Imaging Service Request				
Accession Number	(0008,0050)	O	2	Note: Supported and will always be returned with non-zero length
Requesting Physician	(0032,1032)	O	2	Note: Supported, but will always be returned with zero length
Referring Physician's Name	(0008,0090)	O	2	
All other Attributes from the Imaging Service Request Module		O	3	Note: Not Supported
Visit Identification				
Admission ID	(0038,0010)	O	2	Note: Supported, but will always be returned with zero length
All other Attributes from the Visit Identification Module		O	3	Note: Not Supported
Visit Status				
Current Patient Location	(0038,0300)	O	2	Note: Supported, but will always be returned with zero length

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
All other Attributes from the Visit Status Module		O	3	Note: Not Supported
Visit Relationship				
Referenced Patient Sequence	(0008,1120)	O	2	Note: Supported, but Sequence will always have no Items
>Referenced SOP Class UID	(0008,1150)	O	2	
>Referenced SOP Instance UID	(0008,1155)	O	2	
All other Attributes from the Visit Relationship Module		O	3	Note: Not Supported
Visit Admission				
All Attributes from the Visit Admission Module		O	3	Note: Not Supported
Patient Relationship				
All Attributes from the Patient Relationship Module		O	3	Note: Not Supported
Patient Identification				
Patient's Name	(0010,0010)	R	1	Patient Name shall be retrieved with Single Value Matching or Wild Card Matching.
Patient ID	(0010,0020)	R	1	Patient ID shall be retrieved with Single Value Matching.
All other Attributes from the Patient Identification Module		O	3	Note: Not Supported
Patient Demographic				
Patients Birth Date	(0010,0030)	O	2	
Patient's Sex	(0010,0040)	O	2	
Patient's Weight	(0010,1030)	O	2	
Confidentiality constraint on patient data	(0040,3001)	O	2	Note: Supported, but will always be returned with zero length
All other Attributes from the Patient Demographic Module		O	3	Note: Not Supported
Patient Medical				

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Patient State	(0038,0500)	O	2	Note: Supported, but will always be returned with zero length
Pregnancy Status	(0010,21C0)	O	2	Note: Supported, but will always be returned with zero length
Medical Alerts	(0010,2000)	O	2	Note: Supported, but will always be returned with zero length
Contrast Allergies	(0010,2110)	O	2	Note: Supported, but will always be returned with zero length
Special Needs	(0038,0050)	O	2	Note: Supported, but will always be returned with zero length
All other Attributes from the Patient Medical Module		O	3	Note: Not Supported

If the database query was unsuccessful, MWS responds to the modality with C-FIND-RSP message conveying failure status of the operation (Status Attribute (0000,0900) with value 0xC001). It will also return Success and Pending status codes while returning information to the modality (see table below).

Table 22: Service Status, Meaning, and Codes

Service Status	Further Meaning	Status Codes	Related Fields
Failed	Unable to process	C001	(0000,0901) (0000,0902)
Cancel	Matching terminated due to Cancel request	FE00	None
Success	Matching is complete - No final Identifier is supplied.	0000	None
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys.	FF00	Identifier
Pending	Matches are continuing - Warning that one or more Optional Keys were not supported for existence for this Identifier.	FF01	Identifier

4.2.3.1.4 Presentation Context Acceptance Criterion

The Presentation Contexts that may be accepted by the iSite PACS Worklist Server are specified in Table 10. Proposed Presentation Contexts will be considered in the order proposed by SCU. The first acceptable Presentation Context with Abstract Syntax other than Verification determines the Abstract Syntax that will be used for the association. Later proposed Presentation Contexts may be accepted if they have the same Abstract Syntax and allow a different Transfer Syntax.

4.2.3.1.5 Transfer Syntax Selection Policies

The iSite PACS Worklist Server application entity prefers to process modality worklist transactions encoded using Explicit Little Endian syntax. If offered a choice of Transfer Syntaxes in a Presentation Context, it will apply the following priority to the choice of Transfer Syntax:

1. Explicit VR Little Endian Syntax
2. Explicit VR Big Endian Syntax
3. Implicit VR Little Endian Syntax

4.2.3.2 Real World Activity – Remote System Requests DICOM Verification Service

4.2.3.2.1 Associated Real-World Activity

The iSite PACS DICOM Server will accept and process request for Verification Service that are initiated by remote DICOM entities.

4.2.3.2.2 Accepted Presentation Contexts

Table 23: Accepted Presentation Contexts for iSite PACS Worklist Server and Real-World Activity – Remote System Requests DICOM Verification Service

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Verification	1.2.840.10008.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

4.2.3.2.3 Presentation Context Acceptance Criterion

The iSite PACS DICOM Server will only accept presentation contexts for the Verification Service that request the Verification SOP Class with Implicit VR Little Endian Transfer Syntax.

4.2.3.2.4 Transfer Syntax Selection Policies

The iSite PACS DICOM Server will always select the Implicit VR Little Endian Transfer Syntax for proposed presentation contexts for the Verification Service.

4.3 iSite Radiology Client AE Specification

The iSite Radiology Client AE provides standard conformance to the following DICOM V3.0 SOP class in the roles specified:

Table 24: iSite Radiology Client AE Standard Conformance

SOP Class Name	SOP Class UID	Role
Verification	1.2.840.10008.1.1	SCU

SOP Class Name	SOP Class UID	Role
Basic Grayscale Print Management	1.2.840.10008.5.1.1.9	SCU

4.3.1 Association Establishment Policies

4.3.1.1 General

The Radiology Client will initiate DICOM associations for the DICOM Basic Printing Service and the DICOM Verification Service. The iSite Radiology Client application supports a maximum PDU size of 28K.

4.3.1.2 Number of Associations

The iSite Radiology Client application only initiates a single associated at a time for the DICOM Basic Printing Service.

4.3.1.3 Asynchronous Nature

The iSite Radiology Client application does not request multiple outstanding transactions.

4.3.1.4 Implementation Identifying Information

The iSite Radiology Client uses the following implementation identifying information.

Table 25: iSite Radiology Client Implementation Identifying Information

Implementation Class UID	2.16.840.1.114151.100.1.1

4.3.2 Association Initiation by Real-World Activity

4.3.2.1 Real World Activity – User Requests DICOM Image Printing

4.3.2.1.1 Associated Real-World Activity

The iSite Radiology Client application entity will establish and manage associations with remote DICOM entities to service user requests for DICOM Image Printing. User requests for DICOM Image Printing are initiated by user interaction with the application interface.

4.3.2.1.2 Proposed Presentation Contexts

Table 26: Proposed Presentation Contexts for iSite Radiology Client and Real-World Activity – User Requests DICOM Image Printing

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name List	UID List		
Verification	1.2.840.10008.1.1	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Basic Grayscale Print Management	1.2.840.10008.5.1.1.9	Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCU	None

4.3.2.1.3 SOP Specific Conformance – Basic Grayscale Print Management Meta SOP Class

Table 27: Basic Film Session (UID: 1.2.840.10008.5.1.1.1)

Attribute Name	Tag	Supported Values
Number of Copies	(2000,0010)	Integer String
Print Priority	(2000,0020)	LOW
Medium Type	(2000,0030)	PAPER, CLEAR FILM, BLUE FILM

Table 28: Basic Film Box (UID: 1.2.840.10008.5.1.1.4)

Attribute Name	Tag	Supported Values
Image Display Format	(2010,0010)	STANDARD, ROW, COL
Film Orientation	(2010,0040)	PORTRAIT, LANDSCAPE
Film Size ID	(2010,0050)	8INX10IN, 8_5INX11IN, 10INX12IN, 10INX14IN, 11INX14IN, 11INX17IN, 14INX14IN, 14INX17IN, 24CMX24CM, 24CMX30CM, A4, A3
Magnification Type	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE
Smoothing Type	(2010,0080)	Code String
Border Density	(2010,0100)	BLACK, WHITE, i where i represents the desired density in hundreds of OD
Empty Image Density	(2010,0110)	BLACK, WHITE, i where i represents the desired density in hundreds of OD
Min Density	(2010,0120)	Unsigned Short
Max Density	(2010,0130)	Unsigned Short
Trim	(2010,0140)	YES, NO
Configuration Information	(2010,0150)	Short Text
Illumination	(2010,015E)	Unsigned Short
Reflected Ambient Light	(2010,0160)	Unsigned Short

Attribute Name	Tag	Supported Values
Requested Resolution ID	(2020,0050)	STANDARD, HIGH

Table 29: Basic Image Box (UID: 1.2.840.10008.5.1.1.4)

Attribute Name	Tag	Supported Values
Image Position	(2020,0010)	Unsigned Short
Polarity	(2020,0020)	NORMAL, REVERSE
Magnification Type	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE
Smoothing Type	(2010,0080)	Code String
Configuration Information	(2010,0150)	Short Text
Requested Image Size	(2020,0030)	Decimal String
Requested Decimate/Crop Behavior	(2020,0040)	DECIMATE, CROP, FAIL
Basic Grayscale Image Sequence	(2020,0110)	Sequence of Items
>Samples Per Pixel	(0028,0002)	1
>Photometric Interpretation	(0028,0004)	MONOCHROME2
>Rows	(0028,0010)	Unsigned Short
>Columns	(0028,0011)	Unsigned Short
>Pixel Aspect Ratio	(0028,0034)	Integer String
>Bits Allocated	(0028,0100)	8
>Bits Stored	(0028,0101)	8
>High Bit	(0028,0102)	7
>Pixel Representation	(0028,0103)	0000H
>Pixel Data	(7FE0,0010)	Other Byte String

4.3.3 Association Acceptance Policy

The iSite Radiology Client application does not accept DICOM associated requests.

5 Communication Profiles

5.1 Supported Communication Stacks (Parts 8,9)

5.1.1 TCP/IP Stack

The Philips iSite PACS server provides only DICOM V3.0 TCP/IP Network Communication Support as defined in PS 3.8 of the standard.

5.1.2 API

The Philips iSite PACS server inherits its TCP/IP stack from Microsoft Windows2000Server operating system (Winsock 2).

5.1.3 Physical Media Support

While there are no theoretical differences in the choice of the physical media for TCP/IP networking, the Philips iSite PACS server platform has been quality assurance tested to work with 10 and 100 Base-T Ethernet media. Therefore, Philips recommends the use of these media as the primary point of delivering the network traffic to the server platform.

6 Extensions/Specializations/Privatizations

6.1 Standard Extended/Specialized/Private SOPs

None

6.2 Private Transfer Syntaxes

None

7 Configuration

Only an authorized Philips technical support representative will configure the DICOM features.

8 Support of Extended Character Sets

None

9 Codes and Controlled Terminology

None

10 Security Profiles

None