Kodak DirectView Diagnostic Workstation

Version 5.2

DICOM Conformance Statement

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Revision History

Revision	Date	Author	Reason for Change
1.0	09/2004		First release for software version 5.2

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Rochester, NY 14650

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1 Introduction

1.1 The *Kodak DirectView* Diagnostic Workstation

The *Kodak DirectView* Diagnostic Workstation is a multi-modality diagnostic workstation, which provides quick processing, analysis, manipulation, display, storage and retrieval of images from different modalities.

The workstation communication is based on the DICOM 3.0 standard. This enables the workstation to communicate with any DICOM 3.0 compliant products (e.g., scanners, workstations, hardcopy units). The workstation can function both as a server and as a client. Thus it can send and retrieve images from other stations, and other stations can retrieve and send images to and from the workstation. Images are transferred in the DICOM 3.0 protocol based on TCP/IP as a transport layer.

1.2 About this Document

This document provides the DICOM Conformance Statement for the Diagnostic Workstation implementation of the DICOM 3.0 standard. Conformance Statement defines the subset of options selected from those offered by the DICOM 3.0 standard. Copies of the DICOM 3.0 standard may be obtained by written request or phone by contacting:

NEMA
Suite 1847
1300 North 17th Street
Rosslyn, VA 22209 USA
Phone: (703) 841-3285

It is assumed that the reader of this document is familiar with the DICOM 3.0 standard and with the terminology and concepts, that are used in the standard.

1.3 Important Remarks

The use of this Conformance Statement, in conjunction with the DICOM 3.0 standard, is intended to facilitate communication with the Diagnostic Workstation. However, by itself, it is not sufficient to ensure that inter-operation will be successful. Proceed with caution and be aware of at least the following issues:

It is the user's responsibility to analyze the applications requirements and to design a solution that integrates the workstation properly with the network. The integration of any DICOM compliant device into an existing network goes beyond the scope of the standard.

Testing the complete range of possible interactions between the workstation and other devices should not be overlooked by the user. This includes the accuracy of the image data once it has crossed the interface between the workstation and the other device, and the suitability of the image data for the intended applications. Such a validation is required before any clinical use is performed.

Evolution of the DICOM 3.0 standard may require changes to devices which have implemented it, such as the Diagnostic Workstation. The user should ensure that other DICOM products in the network are also updated as the standard evolves.

If the user encounters unspecified private data elements while parsing a data set coming from the workstation, the user is well advised to ignore those data elements (per the DICOM 3.0 standard). Unspecified private data element information is subject to change without notice.

2 Implementation Model

The Diagnostic Workstation is a multi-modality viewing and processing station. It uses the DICOM protocol to enable the following functions:

- Access to its database
- Loading of images to its memory

The Diagnostic Workstation also uses the DICOM protocol to implement the following services:

- Query remote databases
- Retrieve images from remote databases
- Store images to remote databases
- Print images on a remote printer server

2.1 Application Data Flow Diagrams

The Diagnostic Workstation system implements and provides DICOM services using the following Application Entities:

- *Kodak DirectView* Online Storage Management Software (OSM)
- Diagnostic Workstation

2.1.1 Storage Management (OSM) DICOM Server

This Application Entity (AE) serves as the interface to the database of the stored images on the local hard disk. This Service Class Provider (SCP) provides DICOM Storage and Query-Retrieve services. For complete conformance statement, please refer to the OSM DICOM Conformance Statement document.

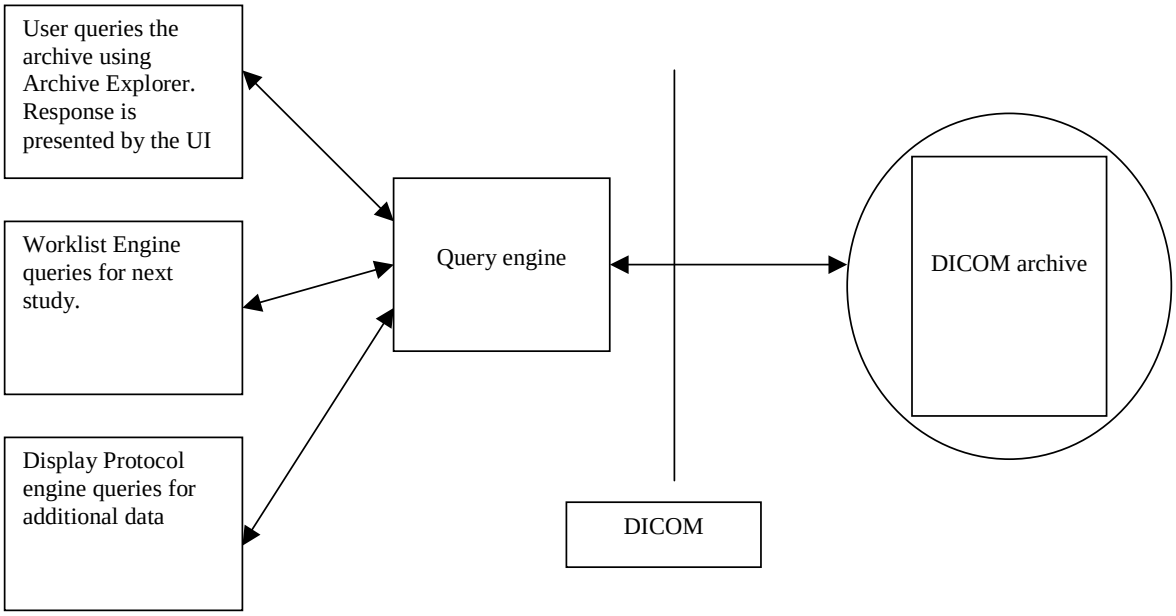
2.1.2 Diagnostic Workstation

The Diagnostic Workstation AE serves for the following:

- Query Engine - Query a DICOM archive
- Loader - Query/Retrieve from a DICOM archive
- Store Client - Store newly created images to DICOM archives (save operation)
- Print Client - Print to DICOM printers

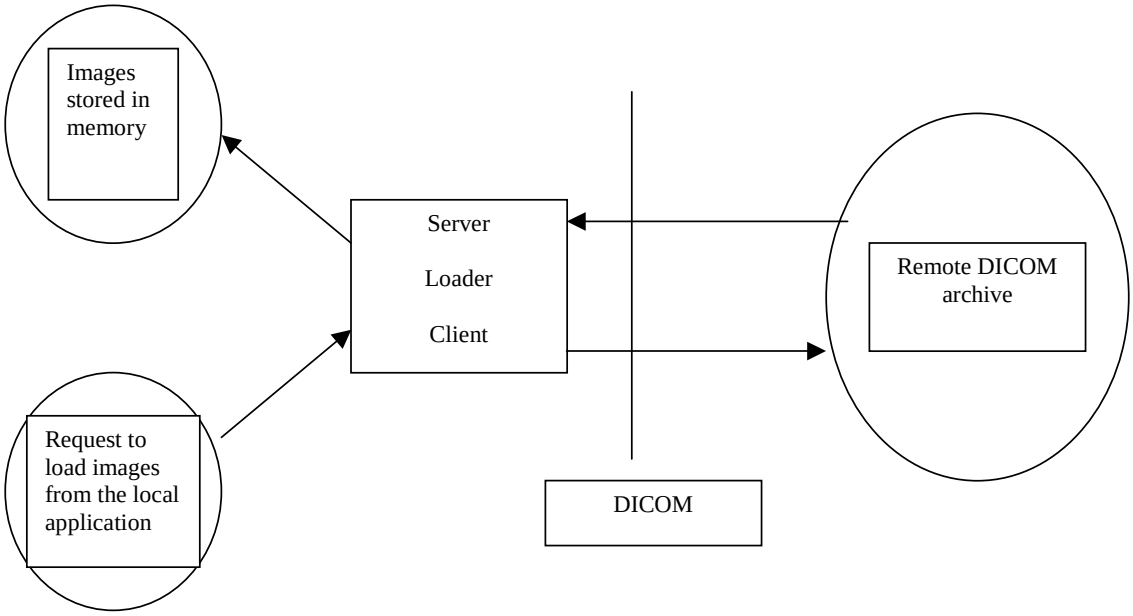
2.1.2.1 Query

In this part the AE is an SCU used to query the contents of remote databases. The results may be presented to the user on the screen or used by the application. The following shows an illustration of Query Engine Activities.



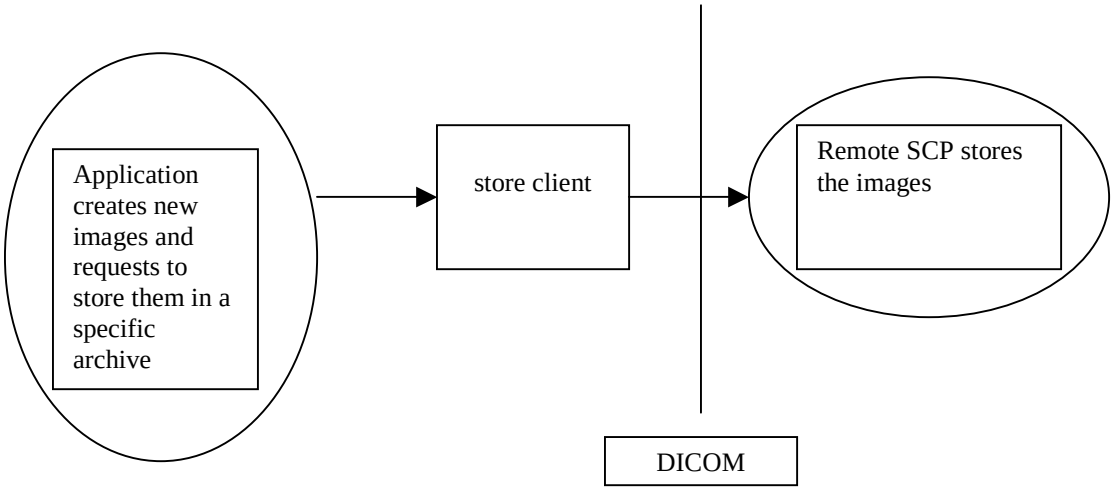
2.1.2.2 Query/Retrieve

This AE serves as the interface to the system's memory by providing the DICOM Storage service. It is used by the system to load images to its own memory. The Diagnostic Workstation system assigns this AE as the target AE of C-MOVE requests it issues when loading images from remote systems. The following shows an illustration of Loader Server-Side and Client-Side Activities.



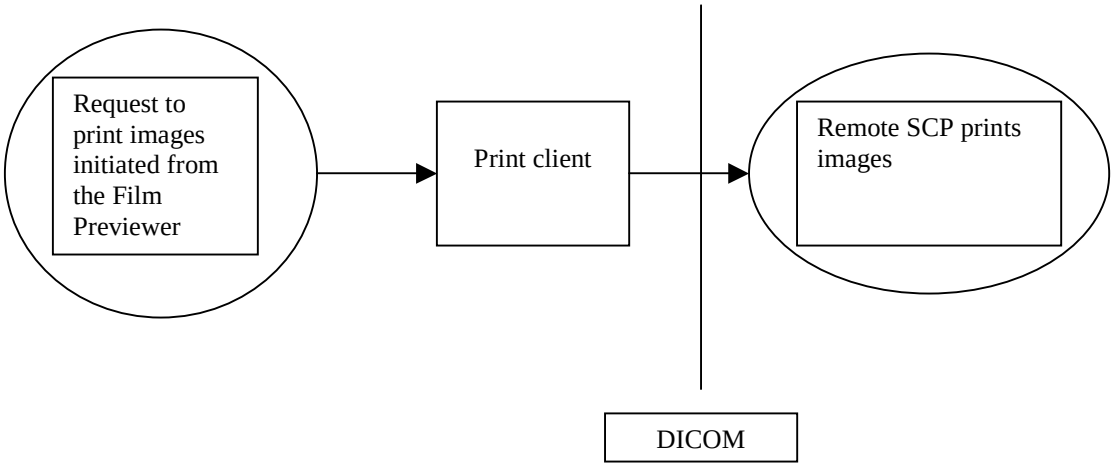
2.1.2.3 Store

In this part the AE is used to store images created by the application to a DICOM archive.



2.1.2.4 DICOM Print

The AE is also used as an SCU for printing images on imagers. The following shows an illustration of Print Client Activities.



2.2 Functional Definitions of AE

2.2.1 OSM DICOM Server

For complete conformance statement, please refer to the OSM Conformance Statement document.

2.2.2 Diagnostic Workstation

2.2.2.1 Query a DICOM server

2.2.2.1.1 Archive Explorer

The Archive Explorer is a GUI (Graphical User Interface) based tool. It enables the user to perform queries using the DICOM protocol. The Archive Explorer lets the user select from a list of archives. It uses configuration to associate each archive with a DICOM Application Entity. Using the GUI, the user can initiate the following activities:

- Query for studies (using the Study Root model)
- Query for series (using the Study Root model)
- Query for images (using the Study Root model)

2.2.2.1.2 Worklist Engine

The Worklist Engine is a private feature responsible for automatically loading the next study assigned to the radiologist. It queries using a filter defining the content of the worklist and query for studies only.

2.2.2.1.3 Display Protocol Engine

The Display Protocol Engine queries the archive for additional data required for correct protocol selection. It queries for series and images.

2.2.2.2 Query/Retrieve from a DICOM server

This part is responsible for loading images into memory. It gets requests from local image processing and display applications to load images to the memory. It performs these requests using the Query-Retrieve Service Class (C-MOVE only). It can perform the following activities:

- Establish an association with a remote AE
- Release an association with a remote AE
- Issue a C-MOVE request (using the Study Root model) where the target AE is the same AE as the server

Server side waits for another application to connect at the presentation address configured for its AE title. Server will accept associations with Presentation Contexts for SOP classes of the Storage and Verification Service Classes. It will receive images on these Presentation Contexts and load them into the system's memory.

2.2.2.3 Store newly created images to DICOM archives

The store client is responsible for interfacing between the storing application and the database. It performs this task using the Store Services (C-STORE).

2.2.2.4 Print to DICOM printers

The print client is responsible for interfacing between any part of the application and a target DICOM printer. The data is handed to the print client packed in DICOM as if the image is to be saved. The print client creates the film boxes and translates the images to meet the printer's pixel format.

3 AE Specifications

3.1 Storage Management (OSM) DICOM Server

See the OSM DICOM Conformance Statement under the DICOM Server section.

3.2 Diagnostic Workstation

3.2.1 Query a DICOM archive

The Diagnostic Workstation provides Standard Conformance to the following DICOM 3.0 SOP classes as an SCU:

SOP Class Name	SOP Class UID
Study Root Q/R Information Model - FIND	1.2.840.10008.5.1.4.1.2.2.1
Patient Root Query/Retrieve Information Model - FIND	1.2.840.1008.5.1.4.1.1.11.1

3.2.1.1 Association Establishment Policies

3.2.1.1.1 General

The maximum PDU size that the Diagnostic Workstation will use is configured, with a minimum of 32K byte.

3.2.1.1.2 Number of Associations

The Diagnostic Workstation can have multiple simultaneous connections. The number of simultaneous associations that will be initiated by the Diagnostic Workstation is virtually unlimited. The Diagnostic Workstation will not initiate more than one association per each AE configured as an SCP.

3.2.1.1.3 Asynchronous Nature

The Diagnostic Workstation will only allow a single outstanding operation on an association. Therefore, the Diagnostic Workstation will not perform asynchronous operations window negotiation.

3.2.1.1.4 Implementation Identifying Information

The Diagnostic Workstation provides a single Implementation Class UID which is 1.2.840.113704.7.0.2. The Application Context Name is 1.2.840.10008.3.1.1.1.

3.2.1.2 Association Initiation by Real World Activity

3.2.1.2.1 User Clicks on a Device Icon

3.2.1.2.1.1 Associated Real World Activity

The Diagnostic Workstation initiates an association when the user explores a device.

3.2.1.2.1.2 Proposed Presentation Contexts

All the Presentation Contexts shown in Table 1 are proposed by the Diagnostic Workstation:

Table 1: Proposed Presentation Contexts for the Diagnostic Workstation

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Study Root FIND	1.2.840.10008.5.1.4.1.2.2.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCU	None

3.2.1.2.1.2.1 SOP Specific Conformance Statement for Study Root FIND

The Diagnostic Workstation provides standard conformance to the DICOM 3.0 Query/ Retrieve Service Class as an SCU for the following SOP Class: Study Root Query/ Retrieve Information Model - FIND, UID = 1.2.840.10008.5.1.4.1.2.2.1.

3.2.1.3 Association Acceptance Policy

This part of the Diagnostic Workstation never accepts an association.

3.2.2 Query/Retrieve from a DICOM archive

3.2.2.1 Loader-Server-Side

Loader-Server-Side provides Standard Conformance to the following DICOM 3.0 SOP Classes as an SCP:

SOP Class Name	SOP Class UID
Verification	1.2.840.10008.1.1
CT Image Storage	1.2.840.10008.5.1.4.1.1.2
MR Image Storage	1.2.840.10008.5.1.4.1.1.4
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Ultrasound Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3
Ultrasound Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
Ultrasound Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2
Digital X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.1
Digital X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.1.1
Digital Mammography X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.2
Digital Mammography X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.2.1
Digital Intra Oral X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.3
Digital Intra Oral X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.3.1
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1
VL Endoscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.1
VL Microscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.2
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.3
VL Photographic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.4
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3

SOP Class Name	SOP Class UID
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1

3.2.2.1.1 Association Establishment Policies

3.2.2.1.1.1 General
The maximum PDU size that the Loader-Server-Side will use is 32K.

3.2.2.1.1.2 Number of Associations
The number of simultaneous associations that will be accepted by Loader-Server-Side is limited only by the kernel parameters of the underlying TCP/IP implementation. Loader Server-Side will spawn a new thread for each connection request it receives. Therefore, Loader Server-Side can have multiple simultaneous connections, and there are no inherent limitations on the number of simultaneous associations that the Application Entity represented by Loader Server-Side can maintain.

3.2.2.1.1.3 Asynchronous Nature
Loader-Server-Side will only allow a single outstanding operation on an association. Therefore Loader Server-Side will not perform asynchronous operations window negotiation.

3.2.2.1.1.4 Implementation Identifying Information
Loader Server-Side provides a single Implementation Class UID that is 1.2.840.113704.7.0.2. The Application Context Name is 1.2.840.10008.3.1.1.1.

3.2.2.1.2 Association Initiation by Real World Activity
Loader Server-Side never initiates an association.

3.2.2.1.3 Association Acceptance Policy
Loader Server-Side places no limitations on the number of simultaneous connections it will support. However, it is possible to control who may connect to Loader Server-Side during the workstation's configuration process.

3.2.2.1.3.1 Remote System Requests Verification
A remote system requests verification from Loader Server-Side using the C-ECHO command.

3.2.2.1.3.1.1 Associated Real World Activity
Loader Server-Side performs the Verification Service Class by responding with C-ECHO-RSP.

3.2.2.1.3.1.2 Presentation Context Table

Any of the Presentation Contexts shown in Table 2 is acceptable to Loader-Server-Side:

Table 2: Acceptable Presentation Contexts for Loader Server-Side

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Verification	1.2.840.10008.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None

3.2.2.1.3.1.2.1 SOP Specific Conformance to Verification SOP Class

Loader Server-Side provides standard conformance to the DICOM 3.0 Verification Service Class as an SCP for the Verification SOP Class, UID=1.2.840.10008.1.1.

3.2.2.1.3.1.3 Presentation Context Acceptance Criterion

Loader Server-Side will accept any Presentation Context from Table 2.

Special configuration must be done in order to accept JPEG transfer syntax (1.2.840.10008.1.2.4.50, 1.2.840.10008.1.2.4.51, 1.2.840.10008.1.2.4.57, 1.2.840.10008.1.2.4.70, 1.2.840.10008.1.2.4.90, 1.2.840.10008.1.2.4.91).

3.2.2.1.3.1.4 Transfer Syntax Selection Policies

Loader-Server-Side prefers an explicit Transfer Syntax encoding. If offered a choice of Transfer Syntax in a Presentation Context, it will apply the following priorities to the choice of Transfer Syntax:

- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

If configured to accept JPEG Transfer Syntaxes (1.2.840.10008.1.2.4.50, 1.2.840.10008.1.2.4.51, 1.2.840.10008.1.2.4.57, 1.2.840.10008.1.2.4.70) then it will apply the following priorities to the choice of Transfer Syntax:

JPEG Lossless configuration:

- JPEG Lossless, Non-Hierarchical (Process 14)
- JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])
- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

JPEG Lossy configuration:

- JPEG Baseline (Process 1)
- JPEG Extended (Process 2 & 4)
- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

3.2.2.1.3.2 Remote System Requests Image Transfer

A remote system requests image transfer from Loader Server-Side, as a result of a C-MOVE command issued by the Loader Client-Side.

3.2.2.1.3.2.1 Associated Real World Activity

The Real World activity associated with the C-STORE operation is the storage of the image in the memory of the system upon which Loader Server-Side is running. Loader Server-Side will issue a failure status if it is unable to store the image in the memory.

3.2.2.1.3.2.2 Presentation Context Table

Any of the Presentation Contexts shown in Table 3 is acceptable to the Loader Server-Side.

3.2.2.1.3.2.3 SOP Specific Conformance to Verification SOP Class

Loader Server-Side conforms to the SOPs of the Storage Service Class at Level 2 (Full). In case of a successful C-STORE, the stored image may be accessed by the requesting application.

The user determines the duration of the storage.

If Loader Server-Side returns one of the following status codes, it means that the C-STORE has been unsuccessful:

A700 -General refusal status.

B000 - General warning status.

C000 - General; failure status.

3.2.2.1.3.2.4 Presentation Context Acceptance Criterion

Loader Server-Side will accept any Presentation Context from Table 3.

Table 3: Acceptable Presentation Contexts for Loader Server-Side

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
CT Image	1.2.840.10008.5.1.4.1.1.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
CT Image	1.2.840.10008.5.1.4.1.1.2		1.2.840.10008.1.2.4.91	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
MR Image	1.2.840.10008.5.1.4.1.1.4	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
MR Image	1.2.840.10008.5.1.4.1.1.4	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
NM Image	1.2.840.10008.5.1.4.1.1.20	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
CR Image	1.2.840.10008.5.1.4.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
CR Image	1.2.840.10008.5.1.4.1.1.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
SC Image	1.2.840.10008.5.1.4.1.1.7	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
XA Image	1.2.840.10008.5.1.4.1.1.12.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
RF Image	1.2.840.10008.5.1.4.1.1.12.2	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
US Image	1.2.840.10008.5.1.4.1.1.6.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
US Image (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
US Multi Frame Image	1.2.840.10008.5.1.4.1.1.3.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
US Multi Frame Image (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2.2	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
DX Image for Presentation	1.2.840.10008.5.1.4.1.1.1.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2.2	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
DX Image for Processing	1.2.840.10008.5.1.4.1.1.1.1.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
MG Image for Presentation	1.2.840.10008.5.1.4.1.1.1.2	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
MG Image for Processing	1.2.840.10008.5.1.4.1.1.1.2.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
IO Image for Presentation	1.2.840.10008.5.1.4.1.1.1.3	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
IO Image for Processing	1.2.840.10008.5.1.4.1.1.1.3.1	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	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	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	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG 2000 Image Compression (Lossless only)	1.2.840.10008.1.2.4.90	SCP	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91	SCP	None

3.2.2.1.3.2.5 Transfer Syntax Selection Policies

Loader Server-Side prefers an explicit Transfer Syntax encoding. If offered a choice of Transfer Syntax in a Presentation Context, it will apply the following priorities to the choice of Transfer Syntax:

- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

If configured to accept JPEG Transfer Syntaxes (1.2.840.10008.1.2.4.50, 1.2.840.10008.1.2.4.51, 1.2.840.10008.1.2.4.57, 1.2.840.10008.1.2.4.70) then it will apply the following priorities to the choice of Transfer Syntax:

JPEG Lossless configuration:

- JPEG Lossless, Non-Hierarchical (Process 14)
- JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])
- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

JPEG Lossy configuration:

- JPEG Baseline (Process 1)
- JPEG Extended (Process 2 & 4)
- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

If configured to accept JPEG 2000 transfer syntax (1.2.840.10008.1.2.4.90, 1.2.840.10008.1.2.4.91) then it will apply the following priorities to the choice of Transfer Syntax:

- JPEG 2000 Image Compression
- JPEG 2000 Image Compression (Lossless Only)
- DICOM Explicit VR Little Endian
- DICOM Explicit VR Big Endian
- DICOM Implicit VR Little Endian (Default)

3.2.2.2 Loader - Client-Side

Loader Client-Side provides Standard Conformance to the following DICOM 3.0 SOP Classes as an SCU:

SOP Class Name	SOP Class UID
Study Root Q/R Information Model - MOVE	1.2.840.10008.5.1.4.1.2.2.2

3.2.2.2.1 Association Establishment Policies

3.2.2.2.1.1 General

The maximum PDU size which the Loader Client-Side will use is 32K.

3.2.2.2.1.2 Number of Associations

Loader Client-Side can have multiple simultaneous connections. The maximal number of simultaneous associations that will be initiated by Loader Client-Side is limited by the configuration of the workstation. Loader Client-Side initiates several associations at a time, one for each transfer request being processed. All active concurrent associations are processed in parallel.

3.2.2.2.1.3 Asynchronous Nature

Loader Client-Side will only allow a single outstanding operation on an association. Therefore, Loader Client-Side will not perform asynchronous operations window negotiation.

3.2.2.2.1.4 Implementation Identifying Information

Loader Client-Side provides a single Implementation Class UID which is 1.2.840.113704.7.0.2. The Application Context Name is 1.2.840.10008.3.1.1.1.

3.2.2.2.2 Association Initiation by Real World Activity

3.2.2.2.2.1 Application Asks for Image Loading

3.2.2.2.2.2 Associated Real World Activity

Loader Client-Side initiates an association when an image processing application asks for image loading from a specified source device using a proprietary IPC protocol.

3.2.2.2.2.3 Proposed Presentation Contexts

All the Presentation Contexts shown in Table 4 are proposed by Loader Client-Side:

Table 4: Proposed Presentation Contexts

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Study Root MOVE	1.2.840.10008.5.1.4.1.2.2.2	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCU	None
Grayscale Softcopy Presentation State	1.2.840.10008.5.1.4.1.1.11.1	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical (Process 14)	1.2.840.10008.1.2.4.57	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])	1.2.840.10008.1.2.4.70	SCU	None

3.2.2.2.2.4 SOP Specific Conformance Statement for Study Root MOVE

Loader Client-Side provides standard conformance to the DICOM 3.0 Query/Retrieve Service Class as an SCU for the following SOP Class: Study Root Query/Retrieve Information Model - MOVE, UID=1.2.840.10008.5.1.4.1.2.2.2.

3.2.2.2.3 Association Acceptance Policy

Loader Client-Side never accepts an association.

3.2.3 Store newly created images to DICOM archives

Store Client provides Standard Conformance to the following DICOM 3.0 SOP Classes as an SCU:

SOP Class Name	SOP Class UID
CT Image Storage	1.2.840.10008.5.1.4.1.1.2
MR Image Storage	1.2.840.10008.5.1.4.1.1.4
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Ultrasound Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3
Ultrasound Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
Ultrasound Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2
Digital X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.1
Digital X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.1.1
Digital Mammography X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.2
Digital Mammography X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.2.1
Digital Intra Oral X-Ray Image Storage for Presentation	1.2.840.10008.5.1.4.1.1.1.3
Digital Intra Oral X-Ray Image Storage for Processing	1.2.840.10008.5.1.4.1.1.1.3.1
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1
VL Endoscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.1
VL Microscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.2
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.3
VL Photographic Image Storage	1.2.840.10008. 5.1.4.1.1.77.1.4
X-Ray Angiographic Bi-Plane Image Storage	1.2.840.10008.5.1.4.1.1.12.3
Positron Emission Tomography	1.2.840.10008.5.1.4.1.1.128
Hardcopy Grayscale Image Storage	1.2.840.10008.5.1.1.29
Hardcopy Color Image Storage	1.2.840.10008.5.1.1.30
Multi-Frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2
Multi-Frame Grayscale Word Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.3
Visible Light Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.1
Visible Light Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.77.2
Nuclear Medicine Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5

3.2.3.1 Association Establishment Policies

3.2.3.1.1 General

The maximum Protocol Data Unit (PDU) size that the Store Client will use is 32K.

3.2.3.1.2 Number of Associations

The number of simultaneous associations that will be accepted by Store Client is limited only by the kernel parameters of the underlying TCP/IP implementation. Store Client will spawn a new process for each connection request it receives. Therefore, Store Client can have multiple simultaneous connections, and there are no inherent limitations on the number of simultaneous associations that the Application Entity represented by Store Client can maintain.

3.2.3.1.3 Asynchronous Nature

Store Client will only allow a single outstanding operation on an association. Therefore Store Client will not perform asynchronous operations window negotiation.

3.2.3.1.4 Implementation Identifying Information

Store Client provides a single Implementation Class Unique IDentifier (UID) which is 1.2.840.113704.7.0.2. The Application Context Name is 1.2.840.10008.3.1.1.1.

3.2.3.2 Association Initiation by Real World Activity

Store Client initiates an association as part of an execution of a C-MOVE command.

3.2.3.2.1 Remote System Requests Image Transfer

A remote system requests image transfer from Store Client by sending C-MOVE Command.

3.2.3.2.1.1 Associated Real World Activity

The Real World activity associated with the C-MOVE command is retrieval of images from the disk and storage of the images to a remote system using a C-STORE command.

3.2.3.2.1.2 Proposed Presentation Contexts

All the Presentation Contexts are proposed by Store Client:

For each of the specified Presentation Context it is possible (needs special configuration) to add the following transfer syntax:

JPEG Lossless configuration:

- JPEG Lossless, Non-Hierarchical (Process 14)
- JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1])

JPEG Lossy configuration:

- JPEG Baseline (Process 1)
- JPEG Extended (Process 2 & 4)

JPEG 2000 Transfer Syntaxes

- JPEG 2000 Image Compression (Lossless Only) 1.2.840.10008.1.2.4.90
- JPEG 2000 Image Compression 1.2.840.10008.1.2.4.91

Multiple C-STORE operations can be performed over a single association.

Upon receiving a C-STORE confirmation containing a successful status, this implementation will perform the next C-STORE operation. The association will be maintained if possible.

Any premature termination of the C-STORE association will result in the ending of the C-MOVE operation.

There are no time-outs implemented in this process.

3.2.4 Print to DICOM printers

Print Client provides Standard Conformance to the following DICOM 3.0 Meta SOP Classes and DICOM 3.0 SOP as an SCU:

SOP Class Name	SOP Class UID
Basic Grayscale Print Manager	1.2.840.10008.5.1.1.9
Basic Color Print Management	1.2.840.10008.5.1.1.18
Print Job	1.2.840.10008.5.1.4.1.1.14

3.2.4.1 Association Establishment Policies

3.2.4.1.1 General

The maximum PDU size which the Print Client will use is 32K.

3.2.4.1.2 Number of Associations

Print Client can have only one open connection at a given time.

3.2.4.1.3 Asynchronous Nature

Print Client will only allow a single outstanding operation on an association. Therefore Print Client will not perform asynchronous operations window negotiation.

3.2.4.1.4 Implementation Identifying Information

Print Client provides a single Implementation Class UID which is 1.2.840.113704.7.0.2. The Application Context Name is 1.2.840.10008.3.1.1.1.

3.2.4.2 Association Initiation by Real World Activity

3.2.4.2.1 User Selects a Printer

3.2.4.2.1.1 Associated Real World Activity

Print Client initiates an association when the user selects a new printer or when the film previewer is initialized. In case of printer selection, the previous association is closed.

3.2.4.2.1.2 Proposed Presentation Contexts

All the Presentation Contexts shown in Table 5 are proposed by Print Manager.

Table 5: Proposed Presentation Contexts for Print Manager

Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	**UID**	**Name**	**UID**		
Basic Grayscale Print Mgt.	1.2.840.10008.5.1.1.9	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
Basic Color Print Mgt.	1.2.840.10008.5.1.1.18	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
Print Job	1.2.840.10008.5.1.1.14	DICOM Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		DICOM Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		DICOM Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None

3.2.4.2.1.2.1 SOP Specific Conformance Statement for Basic Grayscale Print Management Meta SOP Class

Print Client provides standard conformance as an SCU to the DICOM 3.0 Basic Grayscale Print Management Meta SOP Class, UID=1.2.840.10008.5.1.1.9, which consists of the following SOP Classes:

- Basic Film Session, UID=1.2.840.10008.5.1.1.1.
- Basic Film Box, UID=1.2.840.10008.5.1.1.2.
- Basic Grayscale Image Box, UID=1.2.840.10008.5.1.1.4.
- Printer, UID=1.2.840.10008.5.1.1.16.

3.2.4.2.1.2.2 SOP Specific Conformance Statement for Basic Color Print Management Meta SOP Class

3.2.4.2.1.2.3
Print Client provides standard conformance as an SCU to the DICOM 3.0 Basic Color Print Management Meta SOP Class, UID=1.2.840.10008.5.1.1.18, which consists of the following SOP Classes:

- Basic Film Session, UID=1.2.840.10008.5.1.1.1.
- Basic Film Box, UID=1.2.840.10008.5.1.1.2.
- Basic Color Image Box, UID=1.2.840.10008.5.1.1.4.1.
- Printer, UID=1.2.840.10008.5.1.1.16.

3.2.4.2.1.2.4 SOP Specific Conformance Statement for Print Job SOP Class

Print Client provides standard conformance as an SCU to the DICOM 3.0 Print Job SOP Class, UID=1.2.840.10008.5.1.1.14.

3.2.4.3 Association Acceptance Policy

Print Client never accepts an association.

3.2.5 SOP Specific Conformance Statement for Grayscale Softcopy Presentation State

The Diagnostic Workstation provides standard conformance to the DICOM V3.0 Grayscale Softcopy Presentation State as an SCU.

The created SOP Instance of the Class derives from the displayed image: Modality LUT Transformation, VOI LUT Transformation, Presentation LUT Transformation, Shutter Transformation, Image Annotation and Spatial Transformation.

The Diagnostic Workstation provides standard conformance to the DICOM V3.0 Grayscale Softcopy Presentation State as an SCP. The displayed image referred by a SOP Instance of the Class applies the Modality LUT Transformation, Window/Level Transformation, Presentation LUT Transformation, Image Annotation, Shutter Transformation and Spatial Transformation from the SOP Instance of the Class, according to DICOM V3.0 supplement 33.

4 Communication Profiles

4.1 Supported Communications Stacks (Parts 8, 9)

The Diagnostic Workstation provides DICOM 3.0 TCP/IP Network Communication Support as defined in Part 8 of the DICOM Standard.

4.2 TCP/IP Stack

All the Application Entities in the Diagnostic Workstation inherit their TCP/IP stack from the NT system upon which they operate.

4.2.1 Physical Media Support

The Diagnostic Workstation is indifferent to the physical medium over which TCP/IP operates.

4.2.2 Security Profiles

The Diagnostic Workstation supports the TLS 1.0 security profile.

5 Extensions, Specialization, Privatization of SOP Classes, and Transfer Syntax

Not applicable.

6 Configuration

6.1 AE Title/Presentation Address Mapping

This mapping is defined during the Diagnostic Workstation installation procedure.

6.2 Configurable Parameters

- DICOM port number
- Application entity title
- Time-out

7 Support of Extended Character Sets

Support Code Extension Techniques. The following character sets are supported:

- ISO 2022 IR 6 (ASCII 7)
- ISO 2022 IR 100 (Latin-1, ISO-8859-1) for most European Languages
- ISO 2022 IR 87 (JIS X 208) for Japanese
- ISO 2022 IR 159 (JIS X 212) for Japanese
- ISO 2022 IR 13 (JIS X 201 ROMAN) for Japanese
- ISO 2022 IR 13 (JIS X 201) for Japanese
- ISO 2022 IR 149 (KS X 101) for Korean
- GB18030 (GB18030) for Chinese
- ISO IR 192 (UTF-8) for Chinese

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Eastman Kodak Company
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Kodak Canada Inc.
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Canada

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Hedelfingerstrasse 60
70327 Stuttgart
Germany

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