



GEARView™ QC
DICOM Conformance Statement

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Revision History

Date	Revision	Author(s)	Description
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1 Introduction

This conformance statement is designed to communicate technical information regarding the GEARView QC product and its compliance to the DICOM 3.0 standard. GEARView QC provides intuitive functionality for viewing, importing, editing, burning and sending DICOM studies to PACS/EHR.

2 Implementation Model

2.1 Application Data Flow Diagram

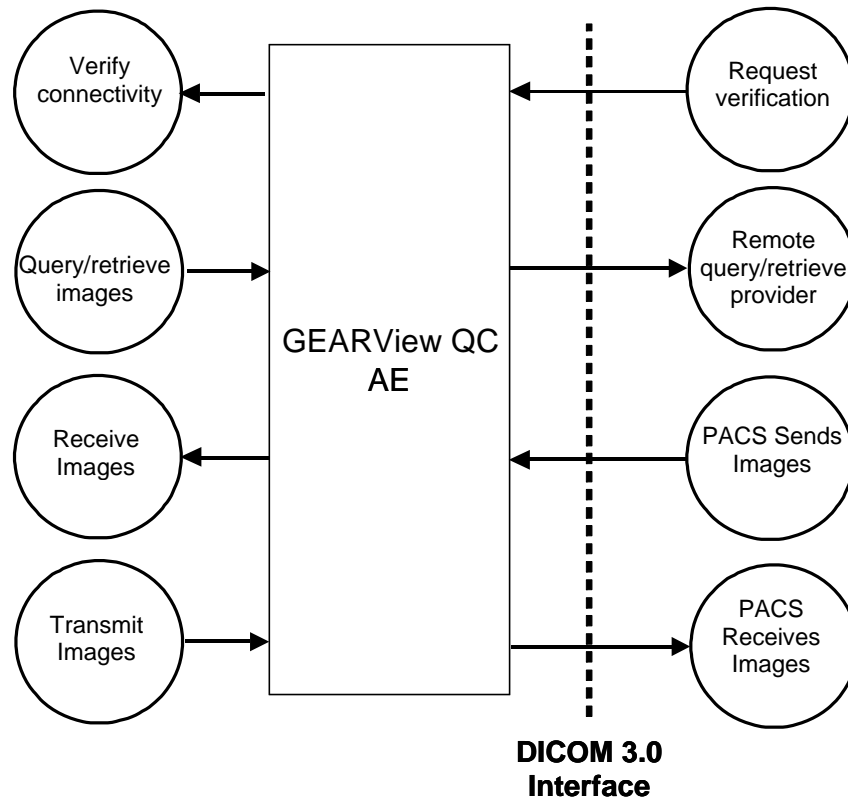


Figure 1. GEARView QC Implementation Model

2.2 Functional Definition of AE's

The GEARView QC application entity supports the following four SCU/SCP functions:

- **Query/Retrieve Images**
This AE is responsible for the management of DICOM query/retrieve SCU activities.
- **Transmit Images**
This AE is responsible for the management of DICOM storage SCU services.
- **Receive Images**
This AE provides the ability to receive and store images as a DICOM storage SCP.
- **Verify Connectivity**
This AE provides the ability to acknowledge DICOM network connectivity as a DICOM verification SCP.

2.3 Sequencing of Real-World Activities

Not applicable.

3 AE Specifications

3.1 GEARView QC AE Specifications

The GEARView QC AE 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
Study Root Q/R Information Model – Move	1.2.840.10008.5.1.4.1.2.2.2
Hard Copy Color Image Storage	1.2.840.10008.5.1.1.29
Hard Copy Grayscale Image Storage	1.2.840.10008.5.1.1.30
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
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 Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.2
Digital Mammography 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
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1
Enhanced XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1.1
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128
CT Image Storage	1.2.840.10008.5.1.4.1.1.2
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
US Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3
US Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1

MR Image Storage	1.2.840.10008.5.1.4.1.1.4
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5
US 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
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2
Multi-frame True Color Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.4
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
Ophthalmic Photography 8-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.1
Ophthalmic Photography 16-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.2
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33
Grayscale Softcopy Presentation State Storage SOP Class	1.2.840.10008.5.1.4.1.1.11.1
Mammography CAD SR Transfer	1.2.840.10008.5.1.4.1.1.88.50
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59

The GEARView QC AE provides standard conformance to the following DICOM 3.0 SOP classes as an SCP. Please note that any additional class not listed below may be added via configuration.

SOP Class Name	SOP Class UID
Verification	1.2.840.10008.1.1
Study Root Q/R Information Model – Find	1.2.840.10008.5.1.4.1.2.2.1
Study Root Q/R Information Model – Move	1.2.840.10008.5.1.4.1.2.2.2
Hard Copy Color Image Storage	1.2.840.10008.5.1.1.29
Hard Copy Grayscale Image Storage	1.2.840.10008.5.1.1.30
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
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 Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.2
Digital Mammography 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
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1
Enhanced XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1.1
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128
CT Image Storage	1.2.840.10008.5.1.4.1.1.2

Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
US Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3
US Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
MR Image Storage	1.2.840.10008.5.1.4.1.1.4
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5
US 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
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2
Multi-frame True Color Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.4
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
Ophthalmic Photography 8-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.1
Ophthalmic Photography 16-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.2
Basic Text SR [†]	1.2.840.10008.5.1.4.1.1.88.11
Enhanced SR Storage [†]	1.2.840.10008.5.1.4.1.1.88.22
Comprehensive SR Storage [†]	1.2.840.10008.5.1.4.1.1.88.33
Study Root Q/R Information Model – Find	1.2.840.10008.5.1.4.1.2.2.1
Study Root Q/R Information Model – Move	1.2.840.10008.5.1.4.1.2.2.2
Grayscale Softcopy Presentation State Storage SOP Class [*]	1.2.840.10008.5.1.4.1.1.11.1
Mammography CAD SR Transfer [†]	1.2.840.10008.5.1.4.1.1.88.50
Key Object Selection Document [†]	1.2.840.10008.5.1.4.1.1.88.59

* - This modality will display a "modality not currently supported" message.

† - This modality will display as plain text.

3.1.1 Association Establishment Policies

3.1.1.1 General

The maximum PDU size for any association establishment that is offered is 512 Kbytes.

3.1.1.2 Number of Associations

The GEARView QC AE can establish up to twenty simultaneous associations. This number is configurable.

3.1.1.3 Asynchronous Nature

The GEARView QC AE does not support asynchronous communication.

3.1.1.4 Implementation Identifying Information

The implementation identifying information for this DICOM 3.0 implementation is:

Implementation Class UID	1.2.7741.122
Version Name	pacsgear_dicom

Figure 2. Implementation Identifying Information

3.1.2 Association Initiation by Real-World Activity

3.1.2.1 Real-World Activity – Query/Retrieve Images

3.1.2.1.1 Associated Real-World Activity

The user is presented with a patient list that allows them to query one or more PACS archives by issuing one or more (C-Find) requests. After a user has selected one or more patient studies, the user can instigate a retrieve (C-Move) for the requested studies back to the GEARView QC station.

3.1.2.1.2 Presentation Contexts

Proposed Presentation Context Table				
Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Study Root Query/Retrieve Information Model – Find	1.2.840.10008.5.1.4.1.2.2.1	Implicit VR Little Endian	SCU	None
Study Root Query/Retrieve Information Model – Move	1.2.840.10008.5.1.4.1.2.2.2	Implicit VR Little Endian	SCU	None

Figure 3. Presentation Context Table – Query/Retrieve Images

3.1.2.1.2.1 SOP Specific Conformance for Study Root Query/Retrieve

Standard conformance is provided to the DICOM Study Root Q/R Service class.

The table below contains the DICOM keys that are utilized by the GEARView QC AE when issuing a DICOM Q/R C-FIND request. The C-FIND request will always use the study root information model.

DICOM Attribute	Comment
(0008,0020) Study Date	Date range can be specified
(0008,0050) Accession Number	User can attempt an exact match
(0008,0052) Query/Retrieve Level	Value is always “STUDY”
(0008,0060) Modality	User can search for a specific modality
(0010,0010) Patient Name	User can narrow the search
(0010,0020) Patient ID	User can attempt an exact match
(0010,0030) Patient Birth Date	Specific birth date can be specified
(0010,0040) Patient Sex	
(0020,1208) No. of Study Related Instances	
(0020,000D) Study Instance UID	

Figure 4. DICOM Q/R C-FIND Attributes

3.1.2.2 Real-World Activity – Transmit Images

3.1.2.2.1 Associated Real-World Activity

The user has the ability to select one or more studies and initiate a send to a destination. The GEARView QC AE will request an association with a single configured AE. GEARView QC will then transmit all of the images over this association, and will request an association release.

3.1.2.2.2 Presentation Contexts

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Hard Copy Color Image Storage	1.2.840.10008.5.1.1.29	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Hard Copy Grayscale Image Storage	1.2.840.10008.5.1.1.30	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
CR Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Mammography Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Mammography Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Intra Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Intra Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Enhanced XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
X-Ray Radio-fluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital X-Ray Image Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
SC Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Multi-frame True Color	1.2.840.10008.5.1.4.1.1.7.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Secondary Capture Image Storage		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Ophthalmic Photography 8-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Ophthalmic Photography 16-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
MG Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
MG Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
NM Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCU	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
RF Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
		Standard PET Image	1.2.840.10008.5.1.4.1.1.128		
JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50				
JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51				
JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70				
JPEG 2000 Lossless	1.2.840.10008.1.2.4.90				
JPEG 2000 Lossy	1.2.840.10008.1.2.4.91				
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11			Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
		Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22	Implicit VR Little Endian	1.2.840.10008.1.2
JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50				
JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51				
JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70				
JPEG 2000 Lossless	1.2.840.10008.1.2.4.90				
JPEG 2000 Lossy	1.2.840.10008.1.2.4.91				
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33			Implicit VR Little Endian	1.2.840.10008.1.2
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Grayscale Softcopy Presentation State Storage SOP Class	1.2.840.10008.5.1.4.1.1.11.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Grayscale Softcopy Presentation State Storage SOP Class	1.2.840.10008.5.1.4.1.1.11.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Mammography CAD SR Transfer	1.2.840.10008.5.1.4.1.1.88.50	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		

Figure 5. Presentation Contexts – Transmit Images

3.1.2.2.1 SOP Specific Conformance for Image Storage

Standard conformance is provided for the supported SOP classes.

3.1.3 Association Acceptance Policy

3.1.3.1 Real-World Activity – Verify Connectivity

The GEARView QC AE will accept associations for C-Echo and provide standard conformance to the DICOM Verification Service class.

3.1.3.1.1 Proposed Presentation Contexts

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

Figure 6. Presentation Contexts - Verification

3.1.3.2 Real-World Activity – Receive Images

The GEARView QC AE will accept associations for C-Storage requests and provide standard conformance to the DICOM Storage Service class for the purpose of caching studies that will be available for use by the GEARView QC user.

3.1.3.2.1 Presentation Contexts

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Hard Copy Color Image Storage	1.2.840.10008.5.1.1.29	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Hard Copy Grayscale Image Storage	1.2.840.10008.5.1.1.30	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
CR Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Mammography Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Mammography Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Digital Intra Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Digital Intra Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Enhanced XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
X-Ray Radio-fluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
Digital X-Ray Image Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
US Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	JPEG 2000 Lossless	1.2.840.10008.1.2.4.90	SCP	None
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
US Image Storage	1.2.840.10008.5.1.4.1.1.6.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
US Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
SC Image Storage	1.2.840.10008.5.1.4.1.1.7	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Multi-frame True Color Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.4	JPEG 2000 Lossy	1.2.840.10008.1.2.4.91	SCP	None
		Implicit VR Little Endian	1.2.840.10008.1.2		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Slide Coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Ophthalmic Photography 8-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Ophthalmic Photography 16-Bit Image Storage	1.2.840.10008.5.1.4.1.1.77.1.5.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
MG Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
MG Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
NM Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
RF Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Standard PET Image	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		

Proposed Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Grayscale Softcopy Presentation State Storage SOP Class	1.2.840.10008.5.1.4.1.1.11.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Grayscale Softcopy Presentation State Storage SOP Class	1.2.840.10008.5.1.4.1.1.11.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		
Mammography CAD SR Transfer	1.2.840.10008.5.1.4.1.1.88.50	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		JPEG Baseline-Process 1	1.2.840.10008.1.2.4.50		
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51		
		JPEG Lossless Non-Hierarchical	1.2.840.10008.1.2.4.70		
		JPEG 2000 Lossless	1.2.840.10008.1.2.4.90		
		JPEG 2000 Lossy	1.2.840.10008.1.2.4.91		

Figure 7. Presentation Contexts - Receive Images

4 Communication Profiles

4.1 Supported Communication Stacks

The GEARView QC AE provides DICOM 3.0 TCP/IP network communication support as defined in PS 3.8.

4.2 TCP/IP Stack

The GEARView QC AE implements DICOM 3.0 on top of the Windows TCP/IP stack.

4.2.1 Physical Media Support

The GEARView QC AE is indifferent to the physical medium over which TCP/IP executes.

5 Extension/Specialization/Privatization

Not applicable.

6 Configuration

The following items related to DICOM are configurable for the GEARView QC AE:

- Local AE Title
- Remote Query/Retrieve AE Titles

- Remote Query/Retrieve IP Addresses
- Remote Query/Retrieve Ports
- Local Server Port
- Supported Transfer Syntaxes
- Supported Abstract Syntaxes
- Server Socket Timeout
- Client Socket Timeout

Please note that one or more remote query locations can be configured.

7 Extended Character Sets

Not applicable.