



MyVue Center Self-Service Kiosk

DICOM Conformance Statement for MyVue Center Platform Server

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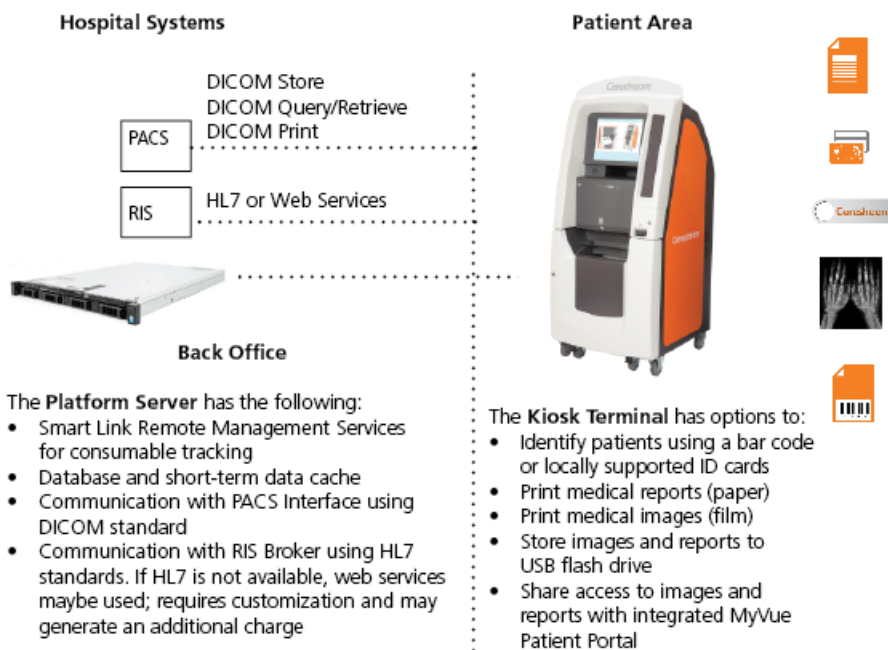
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1 INTRODUCTION

1.1 Overview

The MyVue Center Platform Server can obtain images from a PACS through DICOM Query/Retrieve. The images can be sent to the platform server via DICOM Store. Images can be sent to the platform server via DICOM Print. The platform server outputs images to the CARESTREAM MyVue Center Self-Service Kiosk.

The MyVue Center Platform Server support both echo SCU and SCP.



The following DICOM SOP Classes are supported:

SOP Class Name	SOP Class UID	Service Class Role
Verification SOP Class	1.2.840.10008.1.1	SCP/SCU
Basic Grayscale Print Management Meta SOP Class	1.2.840.10008.5.1.1.9	SCU/SCP
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	SCP
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	SCP
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	SCP
MR Spectroscopy Storage	1.2.840.10008.5.1.4.1.1.4.2	SCP
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	SCP
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	SCP
Raw Data Storage	1.2.840.10008.5.1.4.1.1.66	SCP
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	SCP
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	SCP
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	SCP
Standalone Curve Storage	1.2.840.10008.5.1.4.1.1.9	SCP
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2	SCP
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	SCP
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	SCP
Digital Intra-oral X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.3	SCP
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3	SCP
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	SCP
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	SCP
Basic Text SR Storage	1.2.840.10008.5.1.4.1.1.88.11	SCP
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33	SCP
Mammography CAD SR	1.2.840.10008.5.1.4.1.1.88.50	SCP
Chest CAD SR	1.2.840.10008.5.1.4.1.1.88.65	SCP
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1	SCP
Patient Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.1.1	SCU
Patient Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.1.2	SCU
Study Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.2.1	SCU
Study Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.2.2	SCU

SOP Class Name	SOP Class UID	Service Class Role
Patient Study Only Query Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.3.1	SCU

1.2 About This Document

This document provides the DICOM Conformance Statement for the Print Server implementation of the DICOM-3.0 standard. This DICOM Conformance Statement defines the subset of options selected from those offered by the DICOM v3.0 standard. Copies of the DICOM v3.0 standard may be obtained by written request or phone by contacting:

National Electrical Manufacturers Association

1300 N. 17th Street
 Rosslyn, Virginia 22209 USA

It is assumed that the reader of this document is familiar with the DICOM v3.0 standard and with the terminology and concepts, which are used in the standard.

1.3 Important Remarks

The use of this Conformance Statement, in conjunction with the DICOM v3.0 standard, is intended to facilitate communication with MyVue Center Platform Server. However, by itself, it is not sufficient to ensure that inter-operation will be successful. The user needs to 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 MyVue Center Platform Server 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 MyVue Center Platform Server 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 PACS and the kiosk USB device, and the suitability of the image data for the intended applications. Such a validation is required before any clinical use is performed.

1.4 Definitions, Acronyms, abbreviations

AE	Application Entity
CR	Computed Radiography
DICOM	Digital Imaging and Communications in Medicine

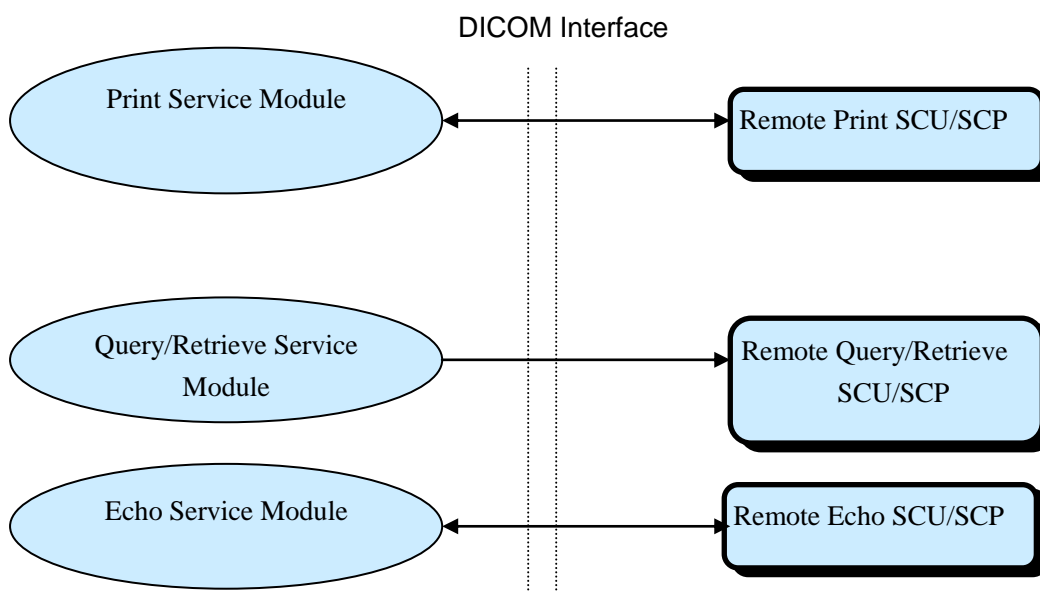
DIMSE	DICOM Message Service Element
IOD	Information Object Definition
OSI	Open Systems Interconnection
PACS	Picture Archive and Communication System
PDU	Protocol Data Unit
SCP	Service Class Provider
SCU	Service Class User
SOP	Service-Object Pair
TCP/IP	Transmission Control Protocol/Internet Protocol
UID	Unique Identifier
PSM	Print Service Module
SSM	Storage Service Module
MWL	Modality Worklist

2 IMPLEMENTATION MODEL

The MyVue Center Platform Server uses the DICOM protocol to implement the following services:

- Receive and store images from remote Print SCU for later printing at kiosk terminal. (Acts as Print SCP)
- Deliver images to remote printers for image printing (Acts as Print Management SCU)
- Receive and store image files from other PACS (Acts as Storage SCP)
- Receive C-Echo request from other PACS or send C-Echo request to other PACS.

Implementation Model Diagram



2.1 Functional Definitions

When the Print Service Module runs, it will read the print jobs' information created by MyVue Center Platform Server and deliver the related images and job information to remote printers as a print SCU.

The echo service module embedded into other service modules, when it acts as SCU, the MyVue Center Platform Server will request verification of communication to a remote DICOM AE using the C-ECHO primitive. When it acts as SCU, after receiving a verification of communication request from a C-ECHO SCU, the *Platform Server* will issue confirmation.

The Storage Service Module, which acts as SCP, waits for another application to connect at the presentation address configured for its Application Entity Title. When another application connects, Storage Service Module expects it to be a DICOM application. It will accept associations with Presentation Contexts for SOP Classes of the Storage Service Class. It will receive images on these Presentation Contexts and write them to standard DICOM files. The Storage service module will also respond to DICOM associations containing verification requests.

Query/Retrieve Service Module will provide SCU services. Acting as a SCU, the system is able to query/retrieve images from remote Query/Retrieve Service Class Provider application. When enabled, the system will send C-FIND requests for new studies in a configurable time range and receive related Study instance UID information. Once Study UID information is received, the system will send C-MOVE requests and receive image data for loading. It supports

- Patient Root Query/Retrieve Information Model – MOVE as SCU
- Patient Root Query/Retrieve Information Model – FIND as SCU
- Study Root Query/Retrieve Information Model – MOVE as SCU
- Study Root Query/Retrieve Information Model – FIND as SCU
- Patient Study Only Query/Retrieve Information Model – FIND as SCU

2.2 Sequencing of Real-World Activities

Print Service Module (PSM):

1. PSM initiates a DICOM association.
2. The remote Print SCP selects the appropriate Abstract and Transfer Syntax's from those proposed by PSM
3. PSM sends a N-CREATE command to create a film session.
4. The remote Print SCP returns "Success".
5. PSM sends a N-CREATE command to create a film box.
6. The remote Print SCP returns "Success"
7. PSM sends N-SET commands to set image boxes on the film box.
8. The remote Print SCP returns "Success"
9. Repeat step 5-8 to set all film boxes and image boxes.
10. PSM sends a N-ACTION command to print.

11. The remote Print SCP returns "Success"
12. PSM sends a N-DELETE command to delete current film box
13. The remote Print SCP returns "Success"
14. PSM sends a N-DELETE command to delete current film session
15. The remote Print SCP returns "Success"
16. PSM releases the association

Storage Service Module (SSM):

SCP

1. The remote AE initiates a DICOM association.
2. The storage service AE selects the appropriate Abstract and Transfer Syntax's from those proposed by the remote AE.
3. The remote AE initiates a C-STORE to send the IOD.
4. The storage service AE responds with a C-Store-RSP upon receipt of the IOD.

3 AE SPECIFICATIONS

The Print Service Module in MyVue Center Platform Server provides Standard Conformance to the following SOP Classes as an SCU and SCP:

SOP Class Name	SOP Class UID
Basic Grayscale Print Management Meta SOP Class	1.2.840.10008.5.1.1.9

The Storage Service Module in MyVue Center Platform Server provides Standard Conformance to the following SOP Classes as a Storage SCP:

SOP Class Name	SOP Class UID
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
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
MR Spectroscopy Storage	1.2.840.10008.5.1.4.1.1.4.2
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1
Raw Data Storage	1.2.840.10008.5.1.4.1.1.66
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2
Standalone Curve Storage	1.2.840.10008.5.1.4.1.1.9
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2
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 Intra-oral X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.3

Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
Basic Text SR Storage	1.2.840.10008.5.1.4.1.1.88.11
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33
Mammography CAD SR	1.2.840.10008.5.1.4.1.1.88.50
Chest CAD SR	1.2.840.10008.5.1.4.1.1.88.65
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1

The MyVue Center Platform Server provides Standard Conformance to the following SOP Classes as both C-ECHO SCP and SCU:

Verification SOP Class	1.2.840.10008.1.1
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The Query/Retrieve Module provides Standard Conformance to the following classes as a Query/Retrieve SCU:

SOP Class Name	SOP Class UID
Patient Root Query/Retrieve Information Model – FIND (SCU)	1.2.840.10008.5.1.4.1.2.1.1
Patient Root Query/Retrieve Information Model – MOVE (SCU)	1.2.840.10008.5.1.4.1.2.1.2
Study Root Query/Retrieve Information Model – FIND (SCU)	1.2.840.10008.5.1.4.1.2.2.1
Study Root Query/Retrieve Information Model – MOVE (SCU)	1.2.840.10008.5.1.4.1.2.2.2
Patient Study Only Query Retrieve Information Model – FIND(SCU)	1.2.840.10008.5.1.4.1.2.3.1

3.1 Print to DICOM Printers

3.1.1 Association Establishment Policies

3.1.1.1 General

MyVue Center Platform Server will initiate a new association to send images to remote printer for printing and the maximum PDU size is 64Kbytes (Film output).

3.1.1.2 Number of Associations

The Print Service Module acting as Print SCU will attempt only one association establishment at one time. All the print jobs are transmitted to printer in sequence.

3.1.1.3 Asynchronous Nature

The Print Service Module will only allow a single outstanding operation on an association. It will not perform asynchronous operations in one session.

3.1.1.4 Implementation Identifying Information

The Print Service Module provides an Implementation Class UID, which is “1.2.840.113564.86.3.0” and an Implementation version name of “GXPLATFORM_3.0”.

3.1.2 Association Initiation Policy

3.1.2.1 Associated Real-World Activity

Print Service Module attempts to initiate a new association for each print job it attempts to transfer.

3.1.2.2 Proposed Presentation Contexts

Presentation Context Table - Proposed					
Abstract Syntax		Transfer Syntax		Role	Expanded Negotiation
Basic Grayscale Print Management	1.2.840.1000 8.5.1.1.9	Implicit Little Endian	1.2.840.10008. 1.2	SCU	None

3.1.2.3 SOP Specific Conformance Statement for Basic Print Management Meta SOP Class

The Meta SOP Class is defined by the following set of supported SOP Classes:

SOP Class	SOP Class UID
Basic Film Session SOP Class	1.2.840.10008.5.1.1.1
Basic Film Box SOP Class	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box SOP Class	1.2.840.10008.5.1.1.4
Presentation LUT SOP Class	1.2.840.10008.5.1.1.23

3.1.2.4 Printer SOP Class

3.1.2.4.1 DIMSE Service N-GET

Attribute	SCU Usage	Tag	Expected Values
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Attribute	SCU Usage	Tag	Expected Values
Printer Status	U	(2110,0010)	NORMAL WARNING FAILURE
Printer Status Info	U	(2110,0020)	Any valid string including the following. for NORMAL conditions: "NORMAL" for WARNING conditions: "RECEIVER FULL", "FILM JAM", "PRINTER NOT RDY", "PROCESSOR DOWN", "CHECK PROCESSOR", "PROC NOT READY", "NO RECEIVE MGZ", "NO SUPPLY MGZ", "NO TONER", "NO STATE", "CHECK RIBBON", "PRINTER BUSY", "OFFLINE", "PRINTER STOPPED", "CHECK SUPPLY MAG", "COVER OPEN", "PRINTER OFFLINE", "EXPOSURE FAILURE", "CHECK R MAG", "PROC NOT RDY", "STATE UNKNOWN", "CHECK INK CART", "INK OUT", "QUEUED", "SUPPLY EMPTY", "SUPPLY LOW", "BAD RECEIVE MGZ", "BAD SUPPLY MGZ", "FILM TRANSP ERR", "CHECK CHEMISTRY", "CHECK SORTER", "CHEMICALS LOW", "CHEMICALS EMPTY",

Attribute	SCU Usage	Tag	Expected Values
Printer Status Info (continued from previous page)			"FINISHER EMPTY", "FINISHER ERROR", "FINISHER LOW", "CHECK PROC", "PRINTER BUSY", "PROC DOWN", "PROC INIT", "PROC OVERFLOW FL", "PROC OVERFLOW HI", "PRINTER DOWN", "PRINTER INIT", "CALIBRATING", "CALIBRATION ERR", "ELEC CONFIG ERR", "ELEC DOWN", "ELEC SW ERROR", "EXPOSURE FAILURE", "REQ MED NOT INST", "REQ MED NOT AVAI", "RIBBON ERROR", "NO RIBBON", "UNKNOWN" for FAILURE conditions: "FATAL", "INVALID PAGE DES", "INSUFFIC MEMORY", "FATAL ERROR", "CHECK PRINTER", "PRINTER DOWN", "NO RESPONSE", "RIBBON MISMATCH", "TIME OUT", "UNKNOWN STATUS"
Printer Name	U	(2110,0030)	Ignored
Manufacturer	U	(0008,0070)	Ignored
Manufacturer Model Name	U	(0008,1090)	Ignored
Device Serial Number	U	(0018,1000)	Ignored
Software Version	U	(0018,1020)	Ignored
Date of Last Calibration	U	(0018,1200)	Ignored
Time of Last Calibration	U	(0018,1201)	Ignored

3.1.2.4.2 Basic Film Session SOP Class

3.1.2.4.2.1 DIMSE Service N-CREATE

Attribute	SCU Usage	Tag	Possible Values
Number of Copies	U	(2000,0010)	1-> 99
Print Priority	U	(2000,0020)	High, Med, Low
Medium Type	U	(2000,0030)	CLEAR FILM, BLUE FILM, MAMMO BLUE FILM
Film Destination	U	(2000,0040)	MAGAZINE, PROCESSOR, BIN_n
Film Session Label	U	(2000,0050)	Up to 64 characters maybe provided

3.1.2.4.2.2 DIMSE Service N-ACTION

The Print service module uses the N-ACTION to instruct the SCP to print all films in the session. For Print SCP that conforms to the N-ACTION specification in Part 4 section H.4.1.2.4 of the DICOM standard.

3.1.2.4.2.3 DIMSE Service N-SET

All attributes supported in the N-CREATE are used with this command.

3.1.2.4.2.4 DIMSE Service N-DELETE

Once a Film Session is deleted, another will not be created on the same association. The association will be released.

3.1.2.4.3 Basic Film Box SOP Class

3.1.2.4.3.1 DIMSE Service N-CREATE

Attribute	SCU Usage	Tag	Possible Values
Image Display Format	M	(2010,0010)	STANDARD\C,R For LANDSCAPE Film Orientation,(C,R) may = (1,2) (2,1) (2,2) (3,2) (4,2) (3,3) (4,3) (5,3) (4,4) (5,4) (6,4) (6,5) (7,5) For PORTRAIT Film Orientation,(C,R) may = (1,1) (1,2) (2,2) (2,3) (2,4) (3,3) (3,4) (3,5) (4,4) (4,5) (4,6) (5,6) (5,7)
Referenced Film	M	(2010,0500)	

Attribute	SCU Usage	Tag	Possible Values
Session Sequence			
>Referenced SOP Class UID	M	(0008,1150)	
>Referenced SOP Instance UID	M	(0008,1155)	
Referenced Basic Image Box Sequence	-	(2010,0510)	Not used
Referenced Basic Annotation Box Sequence	-	(2010,0520)	Not used
Film Orientation	U	(2010,0040)	PORTRAIT, LANDSCAPE
Film Size ID	U	(2010,0050)	4INX6IN 8INX10IN 10INX12IN 14INX14IN 14INX17IN
Magnification Type	U	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE
Max Density	U	(2010,0130)	0-399(Value will be within the activity calibration range of the Printer and will be less than or equal to the Border Density(2010,0080))
Annotation Display Format ID	U	(2010,0030)	Not used
Smoothing Type	U	(2010,0080)	NORMAL ENHANCED ENHANCED1 0-15
Border Density	U	(2010,0100)	BLACK, WHITE, i, where i may = 1-399(if integer value specified, value must be less than or equal to Max Density(2010,0130))
Empty Image Density	U	(2010,0110)	BLACK, WHITE, i, where i may = 1-399(if integer value specified, value must be less than or equal to Max Density(2010,0130))
Min Density	U	(2010,0120)	0-399(Value must be less than Max Density)
Trim	U	(2010,0140)	YES and No
Illumination	U	(2010,015E)	Positive integer in units of cd/m2, required for p-value print
Reflected Ambient light	U	(2010,0160)	Positive integer in units of cd/m2, required for p-value print

3.1.2.4.3.2 DIMSE Service N-ACTION

The Print service module uses the N-ACTION to instruct the SCP to print the current film in the session.

3.1.2.4.3.3 DIMSE Service N-SET

All attributes supported in the N-CREATE are used with this command.

3.1.2.4.3.4 DIMSE Service N-DELETE

The Print service module uses the N-DELETE to delete the current film in the session.

3.1.2.4.4 Basic Grayscale Image Box SOP Class

3.1.2.4.4.1 DIMSE Service N-SET

Attribute	SCU Usage	Tag	Possible Values
Image Position	M	(2020,0010)	All values within the range of Image Display Format
Preformatted Grayscale Image Sequence	M	(2010,0110)	
>Samples Per Pixel	M	(0028,0002)	1
>Photometric Interpretation	M	(0028,0004)	MONOCHROME1, MONOCHROME2
>Rows	M	(0028,0010)	Minimum Value 64 Maximum Values: Known for all Carestream printers, configurable for others. The aspect ratio is used with the printer's page extents, display format, etc., to calculate this value.
>Columns	M	(0028,0011)	Same as Rows (0028,0010)
>Bits Allocated	M	(0028,0100)	8, 16
>Bits Stored	M	(0028,0101)	8, 10,12,14,16
>High Bit	M	(0028,0102)	Bits Stored – 1
>Pixel Representation	M	(0028,0103)	0000H(unsigned integer)
>Pixel Data	M	(7FE0,0010)	All values consistent with Bits Stored
Magnification Type	U	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE Note: Is always the same as the Magnification Type specified for the Film Box
Polarity	U	(2020,0020)	NORMAL, REVERSE
Smoothing Type	U	(2010,0080)	NORMAL, ENHANCED, ENHANCED1 Valid only for Magnification Type CUBIC. 0 – 15 Must be the same as the Smoothing Type specified for the Film Box.
Requested Image Size	U	(2020,0030)	Width of Image Box in millimeters

Attribute	SCU Usage	Tag	Possible Values
			<p>(fractional millimeters supported)</p> <p>0.00 indicates “Maximize film utilization while maintaining Image aspect ratio”. If this value exceeds the available dimensions of the Image Box, it will be accepted only if the Requested Decimate/Crop Behavior value is NOT set to FAIL. An icon will be added to the page indicating that the Requested Image Size was not achieved.</p> <p>A maximum magnification factor is 0.01 and maximum magnification factor of 20 is imposed to achieve the requested image size.</p> <p>If it's not equal to 0.00, it's true size printing.</p>
Requested Decimate/Crop Behavior	U	(2020,0040)	<p>FAIL: If the Image Size exceeds the printable area, the Image will be rejected. If it's true size printing, FAIL will be assigned.</p>

3.1.2.4.5 Presentation LUT SOP Class

3.1.2.4.5.1 DIMSE Service N-CREATE

Attribute	SCU Usage	Tag	Possible Values
Presentation LUT Shape	M	(2050,0020)	IDENTITY (Only for P-value printing)

3.1.3 Association Acceptance Policy

Print Service Module never accepts an association.

3.2 Work as Print SCP (Printer)

The Meta SOP Class is defined by the following set of supported SOP Classes:

SOP Class	UID Value
Basic Film Session SOP Class	1.2.840.10008.5.1.1.1
Basic Film Box SOP Class	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box SOP Class	1.2.840.10008.5.1.1.4
Printer SOP Class	1.2.840.10008.5.1.1.16

SCUs should not mix color and grayscale images in the film session. They should create separate color and grayscale film sessions in succession.

Note: In the sections below, in addition to the Service user interface, the customer user interface also provides the ability to configure some of the attributes and default values.

3.2.1 Basic Film Session SOP Class

3.2.1.1 DIMSE Service N-CREATE

Attribute	SCP Usage	Tag	Possible Values	Default Values
Number of Copies	U	(2000,0010)	1-99	1 Ignore other values, print only 1 copy
Print Priority	U	(2000,0020)	HIGH, MED, LOW	Ignore
Medium Type	U	(2000,0030)	BLUE FILM, CLEAR FILM, MAMMO BLUE FILM	BLUE FILM Configurable from the Imager's User Interface. Save the value in a DICOM file, and then send the DICOM file for printing.
Film Destination	U	(2000,0040)	MAGAZINE, PROCESSOR, BIN_n This value must be selected at the printer for some models. MAGAZINE and PROCESSOR are converted to BIN_1. The imager has only one output bin.	BIN_1
Film Session Label	U	(2000,0050)	Up to 64 characters may be provided	Null String
Memory Allocation	U	(2000,0060)	Not used	Not used

Attribute	SCP Usage	Tag	Possible Values	Default Values
Proposed Study Sequence	U	(2130, 00A0)	SQ	Attributes that may be used to identify Stored Print Storage and Hardcopy Image SOP Instances created to store this Film Session.
->Patient's Name	U	(0010,0010)		Identify patient's name of the film session. Can be empty.
->Patient's ID	U	(0010,0020)		Identify patient's ID of the film session
->Study Instance UID	U	(0020,000D)		Null String Can be empty
->Accession Number	U	(0008,0050)		Identify Accession Number of the film session

3.2.1.2 Film Session N-Create Status Code

Code	Status	Action/Meaning
0000H	Success	Film session created. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0210H	Failure	A film session already exists. Another is not created. (DICOM PS 3.7 Annex C.5.9)

3.2.1.3 DIMSE Service N-Action

The Imager uses N-ACTION to accept print commands from the SCU. Once a print command is received, the Imager prints all films in the session. The Imager conforms to the N-ACTION specification in PS 3.4 Annex H.4.1.2.4 of the DICOM standard, and the Imager collates all film boxes when printed.

3.2.1.4 Film Session N-Action Status Code

Code	Status	Action/Meaning
0000H	Success	All images in the session are printed as specified. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The SOP Instance UID of the requested film session is returned. (DICOM PS 3.7 Annex C.5.19)
B602H	Warning	Nothing is printed. (DICOM PS 3.4 Annex H.4.1.2.4.2)
C600H	Failure	Nothing is printed. (DICOM PS 3.4 Annex H.4.1.2.4.2)

3.2.1.5 DIMSE Service N-SET

The Imager uses N-SET to update the Film Session values as supplied by the SCU.

3.2.1.6 Film Session N-Set Status Code

Code	Status	Action/Meaning
0000H	Success	Film session data is set. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The SOP Instance UID of the requested film session is returned. (DICOM PS 3.7 Annex C.5.19)

3.2.1.7 Film Session N-Delete Status Code

Code	Status	Action/Meaning
0000H	Success	The Film session is deleted. (DICOM PS 3.7 Annex C.1.1)
0112H	Failure	The SOP Instance UID of the specified film session was not found. (DICOM PS 3.7 Annex C.5.19)

3.2.2 Basic Film Box SOP Class

3.2.2.1 DIMSE Service N-CREATE

Attribute	SCP Usage	Tag	Possible Values	Default Values
Image Display Format	M	(2010,0010)	<p>STANDARD\C,R</p> <p>For both PORTRAIT and LANDSCAPE Film Orientation, (C,R) may =</p> <p>(1,1) (1,2) (2,1) (2,2) (2,3) (3,2) (2,4) (4,2) (3,3) (3,4) (4,3) (3,5) (5,3) (4,4) (4,5) (5,4) (4,6) (6,4) (5,6) (6,5) (5,7) (7,5) (6,7) (7,6)</p> <p>(i.e. support 1-up, 2-up, 4-up, 6-up, 8-up, 9-up, 12-up, 15-up, 16-up, 20-up, 24-up, 30-up, 35-up, and 42-up standard formats)</p> <p>ROW\r1,r2,r3...where r1, r2, r3...is the number of images in each row.</p> <p>The rows are limited to 10 and the number of images in each row is limited to 10.</p> <p>CUSTOM\I</p> <p>I = 101, 102</p> <p>Only valid for PORTRAIT Film Orientation (2010,0040).</p> <p>Notes:</p> <p>See Annex B for description</p>	SCU must provide.
Referenced Film Session Sequence	M	(2010,0500)		SCU must provide.
>Referenced SOP Class UID	M	(0008,1150)		SCU must provide.
>Referenced SOP Instance UID	M	(0008,1155)		SCU must provide.
Referenced Basic Image Box Sequence	M	(2010,0510)		SCU must provide.
Referenced Basic Annotation Box Sequence	MC	(2010,0520)		None.
Film Orientation	U	(2010,0040)	PORTRAIT, LANDSCAPE	PORTRAIT

Attribute	SCP Usage	Tag	Possible Values	Default Values
Film Size ID	U	(2010,0050)	8INX10IN 10INX12IN 11INX14IN 14INX14IN 14INX17IN See Annex C for detailed explanation	14INX17IN or The largest film size supported by the printer. Configurable from the Imager's User Interface.
Magnification Type	U	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE	CUBIC Configurable from the Imager's User Interface.
Image Max Density	U	(2010,0130)	BLUE FILM : 180-310** CLEAR FILM: 180-300** MAMMO BLUE FILM: 180-415**	310 Configurable from the Imager's User Interface.
Configuration Information	U	(2010,0150)	Curve Shape (CS): 000 to 999 Contrast Values (CN): -1 to -5 Lower contrast 0 Normal +1 to +5 Higher contrast Pivot Density (PD): 0 to 2.4 in increments of 0.2 Perception LUT Selection (LUT): LUT=m, n (m=string, n = 1 to 15) For TFT n = 1 to 15 For ULUT n = 1 to 12 Text Macros (TM): %PRNTDAT%, %TIM%, %FOF%, %\$TIME\$, %SES% Perception LUT cannot be used with Curve Shape, Contrast or Pivot Density. See Annex A for description	Ignore
Referenced Presentation LUT Sequence	MC	(2050,0500)	If the PLUT is received, the tonescaling data from the above Configuration Information will be ignored.	None
>SOP Class UID	MC	(0008,1150)		None
>SOP Instance UID	MC	(0008,1155)		None

Attribute	SCP Usage	Tag	Possible Values	Default Values
Annotation Display Format ID	U	(2010,0030)	0 - No annotation 1 - Text centered at bottom of film 6 - Six annotation positions on two lines, centered at bottom of film. NONE - No annotation LABEL - Annotation at bottom of film. BOTTOM - Text at bottom of images. COMBINED - 1 line at the bottom of the page and 1 line under each image. See Basic Annotation Box SOP (section 2.4) for valid values for Annotation Position (2030,0010) for each of these formats.	0 (No annotation)
Smoothing Type	U	(2010,0080)	NORMAL (minimum cubic convolution error) ENHANCED, ENHANCED1 (Valid only for Magnification Type CUBIC.) 0-15 (Valid only for Magnification Type CUBIC.)	5 Configurable from the Imager's User Interface.
Border Density	U	(2010,0100)	BLACK, WHITE, i where i may = 0 - 415	Image Max Density Configurable from the Imager's User Interface.
Min Density	U	(2010,0120)	0-310 (Value must be less than Max Density [2010,0130]) This value is used only when PLUT or Curve Shape is applied to the images on the page. When PLUT or Curve Shape is applied, actual minimum density will be the greater of the user requested value and the Dmin of the film.	DMin of the Film
Illumination	MC	(2010,015E)	Positive integer in units of cd/m^2	2000 Configurable from the Imager's User Interface.
Reflective Ambient Light	MC	(2010,0160)	Positive integer in units of cd/m^2	10 Configurable from the Imager's User Interface.
Trim	U	(2010,0140)	YES, NO	NO

3.2.2.2 Film Box N-Create Status Code

Code	Status	Action/Meaning
0000H	Success	Film box created. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0106H	Failure	The invalid attribute value is returned in the response data set. (DICOM PS 3.7 Annex C.5.11)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The film session requested to contain this film box does not exist. (DICOM PS 3.7 Annex C.5.19)
0213H	Failure	Page limit is exceeded. (DICOM PS 3.7 Annex C.5.22)
0120H	Failure	The attribute tag of the missing required attribute is returned. (DICOM PS 3.7 Annex C.5.13)
0121H	Failure	The film box is not created. The required attribute was present, but contained no value. (DICOM PS 3.7 Annex C.5.13)

3.2.2.3 DIMSE Service N-ACTION

The Imager uses the N-ACTION to accept print instruction from the SCU. When such an instruction is received, the Imager prints the current film box in the session.

3.2.2.4 FilmBox N-Action Status Code

Code	Status	Action/Meaning
0000H	Success	All images in the film box are printed as specified. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The film box does not exist. (DICOM PS 3.7 Annex C.5.19)
B603H	Warning	Nothing is printed (DICOM PS 3.4 Annex H.4.1.2.42)
C600H	Failure	Nothing is printed. (DICOM PS 3.4 Annex H.4.1.2.4.2)

3.2.2.5 DIMSE Service N-SET

The Imager uses N-SET to update the Basic Film Box values as supplied by the SCU. The following attributes may be updated:

Attribute	SCP Usage	Tag
Magnification Type	U	(2010,0060)
Max Density	U	(2010,0130)
Configuration Information	U	(2010,0150)
Smoothing Type	U	(2010,0080)
Border Density	U	(2010,0100)
Min Density	U	(2010,0120)
Illumination	MC	(2010,015E)
Reflective Ambient Light	MC	(2010,0160)
Trim	U	(2010,0140)

3.2.2.6 FilmBox N-Set Status Code

Code	Status	Action/Meaning
0000H	Success	Film box data is set. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0106H	Failure	The invalid attribute value is returned in the response data set. (DICOM PS 3.7 Annex C.5.11)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The specified film box does not exist. (DICOM PS 3.7 Annex C.5.19)
0120H	Failure	The attribute tag of the missing required attribute is returned. (DICOM PS 3.7 Annex C.5.13)
0121H	Failure	The required attribute was present, but contained no value. (DICOM PS 3.7 Annex C.5.13)
0213H	Failure	Page limit is exceeded. (DICOM PS 3.7 Annex C.5.22)

3.2.2.7 DIMSE Service N-DELETE

Upon receipt of an N-DELETE from the SCU, the Imager removes the individual image boxes from the session.

3.2.2.8 FilmBox N-Delete Status Code

Code	Status	Action/Meaning
0000H	Success	The film box is deleted. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The SOP Instance UID of the specified film session is returned. (DICOM PS 3.7 Annex C.5.19)

3.2.3 Basic Grayscale Image Box SOP Class

3.2.3.1 DIMSE Service N-SET

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
Image Position	M	(2020,0010)	All values within the range of Image Display Format	SCU must provide.
Preformatted Grayscale Image Sequence	M	(2020,0110)		SCU must provide.
>Samples Per Pixel	U	(0028,0002)	1	1 Only support gray image, save to DICOM file.
>Photometric Interpretation	U	(0028,0004)	MONOCHROME1, MONOCHROME2	MONOCHROME2
>Rows	M	(0028,0010)	Maximum Values: Depends on film size and printer model. The aspect ratio is used with the printer's page extents, display format, etc. to calculate this value. See Annex D.	SCU must provide.
>Columns	M	(0028,0011)	Maximum Values: Depends on film size and printer model. The aspect ratio is used with the printer's page extents, display format, etc. to calculate this value. See Annex D.	SCU must provide.
>Pixel Aspect Ratio	MC	(0028,0034)	R\C R, C = 1 to 9999 (Integer)	1\1
>Bits Allocated	M	(0028,0100)	8, 16	SCU must provide.
>Bits Stored	M	(0028,0101)	8, 10, 12, 14	SCU must provide.
>High Bit	M	(0028,0102)	Bits Stored -1	SCU must provide.
>Pixel Representation	M	(0028,0103)	0000H (unsigned integer)	0000H SCU must provide.
>Pixel Data	M	(7FE0,0010)	All values consistent with Bits Stored	SCU must provide.
Polarity	U	(2020,0020)	NORMAL, REVERSE	NORMAL
Magnification Type	U	(2010,0060)	REPLICATE, BILINEAR, CUBIC, NONE	CUBIC The Film Box

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
				Magnification Type is configurable from the Imager's User Interface.
Smoothing Type	U	(2010,0080)	NORMAL (minimum cubic convolution error) ENHANCED, ENHANCED1 (Valid only for Magnification Type CUBIC.) 0-15 (Valid only for Magnification Type CUBIC.)	5
Configuration Information	U	(2010,0150)	Setting these values will override film box settings for this image position. Curve Shape (CS): 000 to 999 Perception LUT Selection (LUT): LUT=m, n (m=string, n = 0 to 15) Curve Shape and Perception LUT are mutually exclusive. Note that m can be 0. See Annex A for description	. <i>LUT=Ver693c0.w87,6</i> The Film Box Perception Lut Selection is configurable from the Imager's User Interface.
Requested Image Size	U	(2020,0030)	Width of Image Box in millimeters (fractional millimeters supported) 0.00 indicates "Maximize film utilization while maintaining Image aspect ratio". If this value exceeds the available dimensions of the Image Box, it will be accepted only if the Requested Decimate/Crop Behavior value is NOT set to FAIL. An icon will be added to the page indicating that the Requested Image Size was not achieved. A maximum minification factor of 0.01 and maximum magnification factor of 20 is imposed to achieve the requested image size.	0.00
Requested Decimate/Crop Behavior	U	(2020,0040)	DECIMATE/CROP/FAIL DECIMATE: If the Image Size exceeds the printable area, the Image Size will be reduced while preserving the full view of the	DECIMATE Configurable from the Imager's User Interface.

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
			Image. CROP: If the Image Size exceeds the printable area, the Image will be center cropped by removing pixels that fall outside the printable area. An icon will be added to the page indicating that the Image has been cropped. FAIL: If the Image Size exceeds the printable area, the Image will be rejected.	
Referenced Presentation LUT Sequence	U	(2050,0500)	If the PLUT is received, the tonescaling data from the above Configuration Information will be ignored	

3.2.3.2 ImageBox N-Set Status Code

Code	Status	Action/Meaning
0000H	Success	Image box data is set. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0106H	Failure	The invalid attribute value is returned in the response data set. (DICOM PS 3.7 Annex C.5.11)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)
0112H	Failure	The specified film box does not exist. (DICOM PS 3.7 Annex C.5.19)
0120H	Failure	The attribute tag of the missing required attribute is returned. (DICOM PS 3.7 Annex C.5.13)
0121H	Failure	The required attribute was present, but contained no value. (DICOM PS 3.7 Annex C.5.13)
0213H	Failure	Page limit is exceeded. (DICOM PS 3.7 Annex C.5.22)
C603H	Failure	Image Size cannot be achieved with the requested decimate crop behavior.

3.3 Basic Annotation Box SOP Class

3.3.1 DIMSE Service N-SET

The Basic Annotation Box SOP Instance is created by the SCP at the time of the Basic Film Box SOP Instance is created, based on the value of the Annotation Display Format ID attribute (2010,0030) of the Basic Film Box.

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
Annotation Position	M	(2030,0010)	<p>Annotations are placed in order from upper-left to lower-right.</p> <p>If the Annotation Display Format ID is 1, then value must be 1. The text will be printed on one line at the bottom of the film.</p> <p>If the Annotation Display Format ID is 6, then valid range is 1-6. The text will be printed within 2 lines at the bottom of the film, within 6 different positions.</p> <p>If the Annotation Display Format ID is LABEL, the valid range is 0-1. The text will be printed at the bottom of the film on two lines.</p> <p>If the Annotation Display Format ID is BOTTOM, then the valid range is 1 to the number of images in the Film Box. The text will be placed below the images.</p> <p>If the Annotation Display Format ID is COMBINED, then the valid range is 0 to the number of images in the Film Box. Position 0 will be printed at the bottom of the film. The other annotations will be printed below the images. Any annotation box with a position outside the valid range will be ignored.</p>	None.
Text String	M	(2030,0020)	Up to 64 characters (see Note)	None.

Note: the number of characters displayed may be less than 64 characters depending on the size of the film, the page format, the annotation format and the characters used. This exception does not apply to Annotation Format IDs of LABEL or 1.

Note: If an image box is empty, then the corresponding image annotation is not displayed.

3.3.2 Annotation N-Set Status Code

Code	Status	Action/Meaning
0000H	Success	The annotation data is set.

0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.1.1)
0112H	Failure	The annotation box does not exist. (DICOM PS 3.7 Annex C.5.21)
0116H	Warning	Invalid Position was specified. (DICOM PS 3.7 Annex C.5.19)
0213H	Failure	Page limit is exceeded. (DICOM PS 3.7 Annex C.5.22)

3.4 Presentation LUT SOP Class

3.4.1 DIMSE Service N-CREATE

The Presentation LUT SOP Instance is created by the SCP upon receipt of the N-CREATE action. The Print SCU may create Presentation LUT instance prior to being referenced by the Basic Film Box. Multiple Presentation LUT instances are supported in an association, but only one instance will be supported for each image.

The SCU shall send either Presentation LUT Sequence or the Presentation LUT Shape. These values are mutually exclusive and the action will result in an error if neither or both are present. The presence of the Presentation LUT instance overrides any data set in the Configuration Information attribute (2010,0150) of the Film Box or Image Box.

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
Presentation LUT Sequence	M	(2050,0010)		None.
>LUT Descriptor	M	(0028,3002)	The first value is the number of entries in the lookup table. The number of entries shall be equal to the number of possible values in the input. (For 8 bit input will be 256 entries, for 12 bit input it will be 4096 entries) The second value is the first input value mapped, and shall always be 0. The third value specifies the number of bits for each entry in the LUT Data. It shall be between 10 and 14 inclusive.	None.
>LUT Explanation	U	(0028,3003)	Free form text explanation of the meaning of the LUT.	None.

Attribute & Usage	SCP Usage	Tag	Supported Values	Default Values
>LUT Data	M	(0028,3006)	The LUT Data shall be stored in a format equivalent to 16 bits allocated where the high bit is equal to bits stored - 1, where bits stored is the third value of the LUT Descriptor.	None.
Presentation LUT Shape	M	(2050,0020)	Enumerated values IDENTITY and LIN OD.	None.

3.4.2 Presentation LUT N-Create Status Code

Code	Status	Action/Meaning
0000H	Success	The Presentation LUT is created. Some attributes may have different values than those that were requested. The changed attributes will be returned with the values that were used. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)

3.4.3 DIMSE Service N-DELETE

Upon receipt of an N-DELETE from the SCU, the Imager removes the Presentation LUT instance.

3.4.4 Presentation LUT N-Delete Status Code

Code	Status	Action/Meaning
0000H	Success	The Presentation LUT is deleted. (DICOM PS 3.7 Annex C.1.1)
0110H	Failure	The Error Comment field will contain the detailed description of the error. (DICOM PS 3.7 Annex C.5.21)

3.5 Storage SCP

The Storage Service Module in MyVue Center Platform Server provides Standard Conformance to the following SOP Classes as a Storage SCP:

SOP Class Name	SOP Class UID
Verification SOP Class	1.2.840.10008.1.1
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
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
MR Spectroscopy Storage	1.2.840.10008.5.1.4.1.1.4.2
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1

Raw Data Storage	1.2.840.10008.5.1.4.1.1.66
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2
Standalone Curve Storage	1.2.840.10008.5.1.4.1.1.9
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2
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 Intra-oral X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.3
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
Basic Text SR Storage	1.2.840.10008.5.1.4.1.1.88.11
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33
Mammography CAD SR	1.2.840.10008.5.1.4.1.1.88.50
Chest CAD SR	1.2.840.10008.5.1.4.1.1.88.65
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1

3.5.1 Association Establishment Policies

3.5.1.1 General

MyVue Center Platform Server accepts associations from other DICOM modalities to receive images and store them in the local storage system and the maximum PDU size is 64Kbytes.

3.5.1.2 Number of Associations

The Storage Service Module can accept any number of associations, only limited by physical resources such as memory and disk space. It should be noted that system response time will degrade, and could possibly adversely affect a time-out period on other remote AE's.

3.5.1.3 Asynchronous Nature

The Storage Service Module acting as a SCP will only allow a single outstanding operation on an association. Therefore the Storage Service Module will not perform asynchronous operations window negotiation.

3.5.1.4 Implementation Identifying Information

The Storage Service Module in MyVue Center Platform Server will provide an Implementation Class UID, which is “1.2.840.113564.86.3.0” and an Implementation version name of “**GXPLATFORM_3.0**”.

3.5.2 Association Initiation Policy

MyVue Center Platform Server initiates associations for the following activities:

- Accept associations and receive images to store (Image acquisition)

3.5.3 Association Acceptance Policy

When the Storage Service Module accepts an association, it receives any images transmitted on that association and stores the images on disk in the file system with the standard DICOM file format. The Storage service determines whether to accept the connection by checking the calling AE title. The acceptable calling AE titles are configurable.

3.5.3.1 Associated Real-World Activity

The associated Real-World Activity associated with C-STORE operation is the storage of the image on the disk of the system upon which MyVue Center Platform Server is running. The Storage Service Module will issue a failure status if it is unable to store the image on disk.

3.5.3.2 Acceptable Presentation Contexts

Any of the Presentation Contexts shown in the following table are acceptable for Storage service module to receive images.

Presentation Context Table – Accepted					
Abstract Syntax		Transfer Syntax		Role	Expanded Negotiation
All Storage SOP Classes as above	1.2.840.10008.5.1.4.x.x.x	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG lossless, non-hierarchical, first-order prediction	1.2.840.10008.1.2.4.70	SCP	None
		JPEG2000 lossless only	1.2.840.10008.1.2.4.90	SCP	None

Presentation Context Table – Accepted					
Abstract Syntax		Transfer Syntax		Role	Expanded Negotiation
		JPEG2000	1.2.840.10008.1.2.4.91	SCP	None
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

3.5.3.3 SOP Specific Conformance

3.5.3.3.1 SOP Specific Conformance to Verification SOP Class

The Storage Service Module provides standard conformance to the DICOM Verification Service Class.

3.5.3.3.2 SOP Specific Conformance to Storage SOP Classes

The Storage Service Module conforms to the SOP's of the Storage Service Class at Level 2 (Full). No elements are discarded or coerced by the Storage service module. In the event of a successful C-STORE operation, the Image has successfully been written to disk as a standard DICOM file. The duration of the image storage is determined by the MyVue Center Platform Server system by a configurable setting.

3.6 Query/Retrieve SCU

The Query/Retrieve Module provides Standard Conformance to the following classes as a Query/Retrieve SCU:

SOP Class Name	SOP Class UID
Patient Root Query/Retrieve Information Model – FIND (SCU)	1.2.840.10008.5.1.4.1.2.1.1
Patient Root Query/Retrieve Information Model – MOVE (SCU)	1.2.840.10008.5.1.4.1.2.1.2
Study Root Query/Retrieve Information Model – FIND (SCU)	1.2.840.10008.5.1.4.1.2.2.1
Study Root Query/Retrieve Information Model – MOVE (SCU)	1.2.840.10008.5.1.4.1.2.2.2
Patient Study Only Query Retrieve Information Model – FIND(SCU)	1.2.840.10008.5.1.4.1.2.3.1

3.6.1 Implementation Identifying Information

The Storage Service Module in MyVue Center Platform Server will provide an Implementation Class UID, which is “1.2.840.113564.86.3.0” and an Implementation version name of

“GXPLATFORM_3.0”.

3.6.2 Association Initiation Policy

MyVue Center Platform Server initiates associations for the following activities:

- Periodically query for newly arrived studies on the PACS
- Retrieve newly arrived studies from the PACS

3.6.2.1 Associated Real-World Activity

The associated Real-World Activity associated with C-FIND operation is the locating of newly created studies on the remote PACS. The associated Real-World Activity associated with C-MOVE operation is the retrieval of images for storage on the disk of the system upon which MyVue Center Platform Server is running.

3.6.2.2 Acceptable Presentation Contexts

Any of the Presentation Contexts shown in the following table are requested for Query/Retrieve service module.

Presentation Context Table - Proposed					
Abstract Syntax		Transfer Syntax		Role	Expanded Negotiation
All Query/Retrieve SOP Classes as above	1.2.840.10008.5.1.4.1.2.x.x	Implicit Little Endian	1.2.840.10008.1.2	SCU	None

4 COMMUNICATION PROFILES

4.1 Supported Communication Stacks (parts 8,9)

All modules mentioned here in the MyVue Center Platform Server provide DICOM V3.0 TCP/IP Network Communication Support as defined in Part 8.

4.2 OSI Stack

The OSI Stack is not supported.

4.3 TCP/IP Stack

The Print and Storage service modules inherit their TCP/IP stack from the Windows system upon which they run.

4.3.1 Physical Media Support

The Print and Storage service modules are indifferent to the physical medium over which TCP/IP Runs. They inherit this form the Windows system upon which they run.

4.4 DICOM Parameters

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

5 Support of Extended Character Sets

MyVue Center Platform Server shall support various character sets specified in DICOM 3.0 (2009 version), including:

	DICOM Character set
English (USA)	ISO_IR 6, ISO_IR 100 (default)
Chinese (PRC)	GB18030

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