



In-Vision (Genesis)
DICOM Conformance Statement

S9120101
Rev G

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S7301040	In-Vision Product Specification
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1 Introduction

This document describes the conformance to the ACR-NEMA DICOM 3.0 standard for the In-Vision Intravascular Ultrasound imaging system from Volcano Corp.

It shall establish the conformance specifications for the In-Vision system only, and does not apply to other products offered by Volcano Corp.

1.1 DICOM and the In-Vision IVUS Imaging System

The DICOM standard provides a well-defined set of structures and protocols that allow inter-operability of a wide variety of medical imaging devices.

When configured with the DICOM option, the Volcano Corp In-Vision system provides support for essential services related to Intravascular Ultrasound (IVUS) scanning and connectivity to DICOM compliant devices. The Volcano Corp In-Vision system will not support all features supported by the DICOM standard. This document clearly states the DICOM services and SOP classes that are supported by the applications included with the In-Vision system. The intent of this document is to allow users and other vendors who also conform to the DICOM standard to exchange information within the specific context of those elements of the DICOM standard that In-Vision system supports.

This document is written with respect to the adopted portions of the DICOM standard, Revision 3. The following sections of this document follow the outline specified in the DICOM Standard NEMA publication PS3.2.

The In-Vision system supports the Ultrasound Multi-frame Image Storage SOP as a Service Class User (SCU). It also supports Media Interchange of Ultrasound Multi-frame Images on CD-R (120 mm) as a File Set Creator (FSC), using the Ultrasound Application Profile.

1.2 Definitions, Terms, and Abbreviations

ACR

American College of Radiology

AE

Application Entity: The program, In-Vision, which implements DICOM.

DICOM

The 'Digital Imaging and Communications in Medicine' standard.

DICOMDIR

A special file which contains a directory of all DICOM files on the media.

DIMSE

DICOM Message Service Element

FSC

File Set Creator - Role of the Application Entity -- must save files and create a DICOMDIR

IVUS

Intravascular Ultrasound

Media

The storage media - 120mm CD-R

NEMA

National Equipment Manufacturer's Association

PDU

Protocol Data Unit

RWA

Real World Activity

SCP

Service Class Provider

SCU

Service Class User

SOP

Service Object Pair

TCP/IP

Transmission Control Protocol/Internet Protocol

UID

Unique Identifier

2. Implementation Model

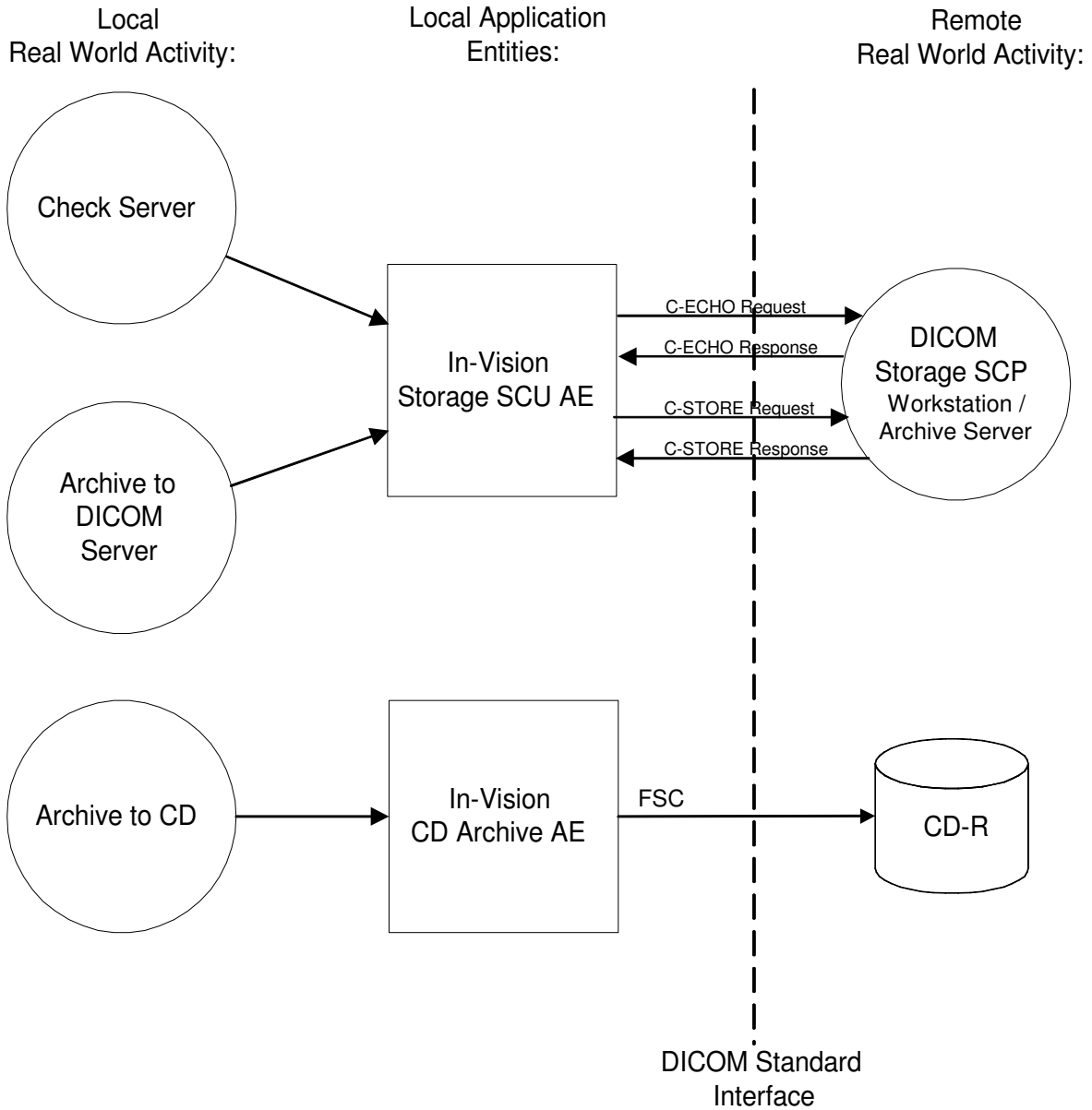
The Implementation Model identifies all of the DICOM Application Entities (AEs) and relates these Application Entities to the Real World Activities (RWAs).

This statement covers the storage of information to networked DICOM Storage SCP devices, and 120mm Compact Disc Recordable (CD-R) media, as specified by ACR-NEMA DICOM 3.0 specification, parts 3, 4, 5, 6, 10, 11, and 12.

2.1 Application Data Flow Diagram

The Volcano Corp In-Vision imaging system can be represented by two Application Entities, the CD Archive AE (describing the writing process to 120mm CD-R media), and the Storage SCU AE (storage process to remote DICOM SCPs).

The diagram in figure 1 represents the In-Vision Application Entities (AE), which are shown as rectangles. The diagram illustrates the relationships between the user invoked activities; Check Server, Archive to DICOM Server, and Archive to CD-R (the circles to the left of the AE), and the associated remote real-world activities provided by the DICOM services (shown as circles to the right of the rectangles).



2.1.1 Check Server

To invoke the Check Server function, the user selects File, Archive, Check Server (a Real World Activity). This is a verification diagnostic, and is provided for the purpose of performing basic communication checks between the In-Vision system and the currently configured DICOM storage device.

The In-Vision AE uses the C-ECHO to verify the communication path to the remote AE.

2.1.2 Archive to DICOM Server

To invoke the Archive to DICOM Server function, the user selects File, Archive, Current case to HD and DICOM Server (a Real World Activity), after a patient exam. The selected items will be written to the hard drive and then sent to the remote DICOM Server in one of the following formats:

- RLE lossless compression
- JPEG lossy compression (either 6X or 20X)
- Uncompressed (Implicit VR little endian or Explicit VR little endian)

The user can select to archive the still images and/or video loops that are presently in memory, to the remote DICOM Server.

The user can acquire and archive up to eight stills (static images) and three video loops per case.

Images are transferred using the Ultrasound Multi-frame Image Storage SOP.

Still images are stored as multi-frame images, with a frame count of 1. Video loops are stored as multi-frame images, with a maximum frame count of 5400.

Archiving cases directly from hard drive to DICOM Server may also be selected. Images will be transferred in the same format they were archived to the hard drive with.

2.1.3 Archive to CD-R

To invoke the Archive to CD function, the user selects File, Archive, Current case to CD (a Real World Activity), after a patient exam. The selected items will be written to the CD-R in one of the following formats:

- RLE lossless compression
- JPEG lossy compression (either 6X or 20X)
- Uncompressed (Explicit VR little endian)

Through the archive menu, the user can select to archive the still(s) and/or video loop(s) that are presently in memory, to the CD-R media.

The user can acquire and archive up to eight stills (static images) and three video loops per case.

Images are stored as DICOM Part 10 files, using the Ultrasound Multi-frame image IOD.

Still images are stored as multi-frame images, with a frame count of 1. Video loops are stored as multi-frame images, with a maximum frame count of 5400.

Archiving cases directly from hard drive to CD may also be selected. Images will be archived to CD in the same format they were archived to the hard drive with.

A DICOMDIR file will be created to reference all DICOM files on the CD-R media.

2.2 Application Entity Functional Definition

2.2.1 Application Entity: In-Vision Storage SCU

2.2.1.1 Verification Real-World Activities

The In-Vision Storage application entity performs the Verification Service Class as SCU thus allowing the operator to verify the ability of an application on a remote node to receive DICOM messages (C-ECHO DIMSE). The AE initiates an association to the Store SCP server, verifying its on-line status when the user selects “Check Server”.

2.2.1.2 Store Real-World Activities

The In-Vision Storage application entity performs all of the functions to transmit ultrasound images and associated data to network servers and/or workstations. The In-Vision Storage AE supports the Ultrasound Multi-frame Image Storage SOP class as an SCU. The AE initiates an association to the Store SCP server when the user selects “Archive to DICOM Server”.

2.2.2 Application Entity: In-Vision CD Archive

Referring to Figure 1, the local Real World Activity, “Archive to CD-R” will cause the Application Entity “In-Vision CD Archive AE” to store data to the CD-R as a File Set Creator (FSC).

The term File Set Creator means that In-Vision will store the data to the CD-R media, and will create a DICOMDIR referencing all DICOM files on the CD-R media.

The In-Vision CD Archive AE supports the following functions:

1. Storage of images and data as DICOM Part 10 files (US-MF IOD)
2. Creation of a DICOMDIR

2.3 Sequencing of Real World Activities:

In order for remote processes to be able to provide the Real World Activity SCP services which the In-Vision system, an SCU, has requested, the appropriate association must first be successfully opened. This initiation occurs with the “Archive to DICOM Server” operation.

3 Application Entity Specifications

The following specification applies to the AE as depicted in Figure 1.

3.1 In-Vision Storage SCU AE Specification

3.1.1 Association Establishment Policies

3.1.1.1 General

The In-Vision system uses TCP/IP. The Maximum Length PDU negotiation is included in all association establishment requests. The maximum length PDU offered for an association initiated by In-Vision is: 64k

The following DICOM Application Context Name UID is proposed and recognized:

Application Context Name: “1.2.840.10008.3.1.1.1”

3.1.1.2 Number of Associations

The maximum number of simultaneous associations for the In-Vision Storage AE is one. A separate association will be negotiated for each case transferred.

3.1.1.3 Asynchronous Nature

All associations use the default synchronous mode of operation.

3.1.1.4 Implementation Identifying Information

Implementation Class UID: “2.16.840.1.113977”

Implementation Version Name: “ENDOSONICS 1.02”.

3.1.2 Association Initiation by Real-World Activity

3.1.2.1 Real-World Activity “Check Server”

The In-Vision system is capable of supporting Verification service class as an SCU.

Verification can be initiated as a singular event from the Archive dialog to any configured SCP that supports Verification. Verification is invoked, and the association is opened, when the user selects the “Check Server” function in the Archive dialog. The association is closed after completion of the verification process.

3.1.2.1.1 Proposed Presentation Context

The In-Vision system will only propose a single Presentation Context, as shown in Table 3.1-1.

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1		

Table 3.1-1 Presentation Context

3.1.2.2 Real-World Activity “Archive to DICOM Server”

When images are transferred to a DICOM Store SCP, the system establishes an association between the In-Vision Storage AE and the identified DICOM device (i.e. Network Archive Server, Workstation Server). An association is initiated with the remote DICOM Storage SCP when the user selects File, Archive, and then selects either; “Cases from hard drive to DICOM Server” or “Current case to HD and DICOM Server”. When multiple cases are sent, a separate association is opened for each case. After all images in the case are transferred, the association is closed.

3.1.2.2.1 Proposed Presentation Contexts

In this case, the In-Vision Storage SCU will only propose a single Presentation Context, as shown in Table 3.1-2

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Ultrasound 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
		Explicit VR Little Endian	1.2.840.10008.1.2.1		
		RLE Lossless	1.2.840.10008.1.2.5		
		JPEG Lossy (Baseline)	1.2.840.10008.1.2.4.50		

Table 3.1-2 Presentation Context

3.1.2.2.2

SOP Specific Conformance Statement: US-MF Image Storage SOP Class

The In-Vision Storage SCU AE does not support extended negotiations.

3.1.3 Association Acceptance Policy

The In-Vision Storage SCU AE does not accept associations.

3.2 CD Archive In-Vision AE Specification

The In-Vision CD Archive AE provides standard conformance to the DICOM Media Storage Service and File Format Class (PS 3.10) and the Media Storage Application Profile (PS 3.11).

Application Profile	Identifier	Real World Activity	Role	SC Option
Ultrasound	STD-US-ID-MF-CDR	Archive to CD	FSC	Interchange

Table 3.2-1: Application Profile, Activities, and Roles of the In-Vision CD Archive AE

Information Object Definition	SOP Class UID	Transfer Syntax	Transfer Syntax UID
DICOM Media Storage Directory	1.2.840.10008.1.3.10	Explicit VR Little Endian Uncompressed	1.2.840.10008.1.2.1
Ultrasound Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Explicit VR Little Endian Uncompressed	1.2.840.10008.1.2.1
		RLE Lossless Image Compression	1.2.840.10008.1.2.5
		JPEG Lossy (baseline)	1.2.840.10008.1.2.4.50

Table 3.2-2: Supported SOP Classes

3.2.1 Application Entity Title

The Application Entity Title used is “ENDOSONICS”.

3.2.2 Real World Activity - Archive to CD

The In-Vision AE will act as a FSC using the Interchange option when storing images and data to CD-R media.

3.2.2.1 Application Profile for Real World Activity

Please refer to Table 3.2-1 for the Application Profile that invokes this Application Entity

3.3 Required and optionally applied Attributes

The following table denotes the attributes included in the Ultrasound Multi-Frame Image Object as implemented in the In-Vision system. Attributes not listed are not used.

Module	Attribute	Tag	Notes
Patient	Patient's Name	(0010,0010)	Entered in the patient dialog box. This field must be filled in by the user.
	Patient ID	(0010,0020)	Entered in the patient dialog box - default is zero length.
	Patient's Birth Date	(0010,0030)	Entered in the patient dialog box - default is zero length.
	Patient's Sex	(0010,0040)	Entered in the patient dialog box - default is zero length.
General Study	Study Instance UID	(0020,000D)	Unique Volcano Corp ID
	Study Date	(0008,0020)	Set to the date that the procedure started.
	Study Time	(0008,0030)	Set to the time that the procedure started.
	Referring Physician's Name	(0008,0090)	Not used at this time - zero length.
	Study ID	(0020,0010)	Encoded with current date & time.
	Accession number	(0008,0050)	Entered in the patient dialog box - default is zero length.
	Study Description	(0008,1030)	Set to "IVUS"
General Series	Modality	(0008,0060)	Set to "US"
	Series Instance UID	(0020,000E)	Unique Volcano Corp ID
	Series Number	(0020,0011)	Set to 1
	Laterality	(0020,0060)	Not used at this time - zero length.
	Performing Physicians' Name	(0008,1050)	Entered in the patient dialog box - default is zero length.
	Series Description	(0008,103E)	Not used at this time - zero length.
General Equipment	Manufacturer	(0008,0070)	Set to "Volcano Corp"
	Institution Name	(0008,0080)	Entered in the patient dialog box - default is zero length.
	Institution Address	(0008,0081)	Not used at this time - zero length.
	Station Name	(0008,1010)	Not used at this time - zero length.
	Institutional Department Name	(0008,1040)	Not used at this time - zero length.



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	Manufacturer's Model Name	(0008,1090)	Set to "IN-VISION"
	Device Serial Number	(0018,1000)	Set to the serial number of the system.
	Software Version	(0018,1020)	Set to the version number used by the system. I.e. "In-Vision ® Gold V5.2"
General Image	Instance Number (Image Number)	(0020,0013)	Image number in series (1 - 11)
	Image Date	(0008,0023)	Set to the date the image was created.
	Image Time	(0008,0033)	Set to the time the image was created.
	Patient Orientation	(0020,0020)	Not used at this time - zero length.
	Image Comments	(0020,4000)	Not used at this time - zero length.
	Lossy Image Compression	(0028,2110)	Set to "0" - if image has NOT been subject to lossy compression, otherwise set to "1".
Image Pixel	Samples per Pixel	(0028,0002)	Set to "1" for PALETTE COLOR. Set to "3" for YBR_FULL_422
	Photometric Interpretation	(0028,0004)	Set to "PALETTE COLOR" for RLE and uncompressed images. Set to "YBR_FULL_422" for JPEG images.
	Rows	(0028,0010)	Set to 384
	Columns	(0028,0011)	Set to 384
	Bits Allocated	(0028,0100)	Set to 8
	Bits Stored	(0028,0101)	Set to 8
	High Bit	(0028,0102)	Set to 7
	Pixel Representation	(0028,0103)	Set to 0
		Pixel Data	(7FE0,0010)
	Planar Configuration	(0028,0006)	Set to 0, only export for JPEG images
Cine	Frame Time	(0018,1063)	Set to number of milliseconds between frames
Multi-Frame	Number of frames	(0028,0008)	Value = 1 to 5400
	Frame Increment Pointer	(0028,0009)	Set to (0018,1063)
Palette Color Lookup Table	Red Palette Color Lookup Table Descriptor	(0028,1101)	Set to 256,0,16 – Not exported for JPEG images.
	Green Palette Color Lookup Table Descriptor	(0028,1102)	Set to 256,0,16 – Not exported for JPEG images.
	Blue Palette Color Lookup Table Descriptor	(0028,1103)	Set to 256,0,16 – Not exported for JPEG images.
	Red Palette Color Lookup Table Data	(0028,1201)	Set to 256 16-bit levels of red – Not exported for JPEG images.



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	Green Palette Color Lookup Table Data	(0028,1202)	Set to 256 16-bit levels of green – Not exported for JPEG images.
	Blue Palette Color Lookup Table	(0028,1203)	Set to 256 16-bit levels of blue – Not exported for JPEG images.
US Region Calibration	Sequence of Ultrasound regions	(0018,6011)	Defines a sequence of Ultrasound Regions with a single item
	> Region Location Min X(0)	(0018,6018)	Set to 0
	> Region Location Min Y(0)	(0018,601A)	Set to 0
	> Region Location Max X(1)	(0018,601C)	Set to 383
	> Region Location Max Y(1)	(0018,601E)	Set to 383
	> Physical Units X Direction	(0018,6024)	Set to 3 for cm
	> Physical Units Y Direction	(0018,6026)	Set to 3 for cm
	> Physical Delta X	(0018,602C)	Physical value increment per positive X pixel increment, in centimeters. This value is set based on image diameter.
	> Physical Delta Y	(0018,602E)	Physical value increment per positive Y pixel increment, in centimeters. This value is set based on image diameter.
	> Reference Pixel X(0)	(0018,6020)	X location of the reference point - Set to 191, which is the center of the catheter
	> Reference Pixel Y(0)	(0018,6022)	Y location of the reference point - Set to 191, which is the center of the catheter
	> Reference Pixel Physical Value X	(0018,6028)	Set to 0 cm
	> Reference Pixel Physical Value Y	(0018,602A)	Set to 0 cm
	> Region Spatial Format	(0018,6012)	Set to 1 (2D)
> Region Data Type	(0018,6014)	Set to 1 (tissue)	
> Region Flags	(0018,6016)	Set to 0 - no special handling	
US Image	Image Type	(0008,0008)	Set to "ORIGINAL\PRIMARY\INTRAVASCULAR\0001"
	Transducer Data	(0018,5010)	Set to Catheter Model\Serial #\
	Depth of Scan Field	(0018,5050)	Set to the radius, in mm
SOP Common	Specific Character Set	(0008,0005)	Set to ISO IR 100
	SOP Class UID	(0008,0016)	Set to US Multi-Frame Image 1.2.840.10008.5.1.4.1.1.3.1
	SOP Instance UID	(0008,0018)	Unique Volcano Corp ID
Extended	Pixel Spacing	(0028,0030)	Value is set based on image diameter, in millimeter. See Note 1
Private Tags	Private group length	(0029,0000)	Number of bytes in group

	Private creator ID code	(0029,0010)	Set to "ESON-PCDE 1.0"
	PULLBACK RATE	(0029,1000)	VR = DS. Value is specified in units of millimeter per second. See Note 2 & 3.

Note 1: This attribute is not part of the US Multi-Frame Image IOD and is a standard extended SOP Class attribute. This attribute is optional (type 3), and its support is not required by SCPs.

Note 2: The In-Vision V4.0.x software release supports a DICOM Private tag that will be used to convey IVUS Pull Back Rate. The "IVUS Pull Back Rate" private tag will only be included in DICOM image objects that are video loops (frames > 1). Valid PULLBACK rates are defined as either 0.5 mm/Sec or 1.0 mm/Sec. If a valid PULLBACK rate has not been defined, the pullback rate element (0029, 1000) shall be zero length. This attribute is optional (type 3), and its support is not required by SCPs.

Note 3: This tag is likely to be deprecated in future implementations of the system in favor of the newly added official tag, (0018, 3101).

4 Communication Profiles

4.1 Supported Configuration Stacks (parts 8, 9)

The In-Vision Storage SCU provides DICOM V3.0 TCP/IP Network Communication Support as defined in PS 3.8.

4.2 TCP/IP Stack

The In-Vision Storage SCU inherits the TCP/IP stack from the Windows NT operating system upon which it executes. By default port number 104 is used for DICOM communication with the In-Vision.

4.2.1 Physical Media Support

The In-Vision Storage SCU is indifferent to the physical medium over which TCP/IP executes; it inherits this from the Windows NT system upon which it executes. The In-Vision system hardware supports IEEE 802.3 - 10BaseT ("twisted pair").

5 Extension/Specializations/Privatizations

5.1 Standard Extended SOP Ultrasound Multi-Frame Image Storage

The In-Vision system extends the US-MF IOD to include the following attributes:

Extended	Pixel Spacing	(0028,0030)	Value is set based on image diameter, in millimeter. See Note 1
Private Tags	Private group length	(0029,0000)	Number of bytes in group
	Private creator ID code	(0029,0010)	Set to "ESON-PCDE 1.0"
	PULLBACK RATE	(0029,1000)	VR = DS. Value is specified in units of millimeter per second. See Note 2.

Note 1: This attribute is not part of the US Multi-Frame Image IOD and is a standard extended SOP Class attribute. This attribute is optional (type 3), and its support is not required by SCPs.

Note 2: The In-Vision V4.0.x software release supports a DICOM Private tag that will be used to convey IVUS Pull Back Rate. The "IVUS Pull Back Rate" private tag will only be included in DICOM image objects that are video loops (frames > 1). Valid PULLBACK rates are defined as either 0.5 mm/Sec or 1.0 mm/Sec. If a valid PULLBACK rate has not been defined, the pullback rate element (0029,1000) shall be zero length. This attribute is optional (type 3), and its support is not required by SCPs.

6 Configuration

6.1 AE Title / Presentation Address Mapping

The In-Vision DICOM Network Configuration is used for mapping of an Application Entity Title to a Presentation Address. A Presentation Address consists of a host name and port number. The In-Vision DICOM Network Configuration Dialog is used by In-Vision Storage SCU to establish associations to remote Application Entities. It is used to determine the socket number upon which it will wait for connections.

6.2 Configurable Parameters

The In-Vision DICOM Network Configuration Dialog contains fields to configure networking and DICOM parameters for both the local host (In-Vision system) the remote DICOM Store SCP host. The DICOM Network Configuration Dialog is entered by selecting the "**SETTINGS**" softkey in the **SET UP** softkey layout, and then selecting the "**Configure DICOM/Network**" button.

6.2.1 Network Configuration

The following networking parameters are user configurable through the DICOM Network Configuration Dialog:

6.2.1.1 Local Host - Hostname

The hostname field is used to configure the computer host name for the In-Vision system. The factory default will be **"In-Vision"**.

6.2.1.2 Local Host - IP Address

This field is used to configure the network IP address for the In-Vision system.

6.2.1.3 Local Host - Subnet Mask

This field is used to configure the Subnet mask for the sub-network that the In-Vision system resides on. The system uses the Subnet mask to determine if communication with the remote host must be routed through the gateway.

6.2.1.4 Local Host - Use DHCP / Specify IP Address

These radio buttons determine whether DHCP (Dynamic Host Configuration Protocol) is used to configure the In-Vision's IP address, or a user specified IP address is used.

6.2.1.5 Remote DICOM Store Host - Hostname

The hostname field is used to configure the remote computer host name for the system that the In-Vision will be sending DICOM images to.

6.2.1.6 Remote DICOM Store Host - IP Address

The IP Address field is used to configure the network IP address for the system that the In-Vision will be sending DICOM images to.

6.2.1.7 Remote DICOM Store Host - Gateway

This field is used to configure the IP address for the default gateway. The system routes information through this gateway if the In-Vision and the Remote host do not reside on the same network.

6.2.1.8 Remote DICOM Store Host - PING Host

This button is used to test the network connection between the In-Vision and the Remote Store SCP host. A network PING (Packet Internet Grouper) is used to test the connection.

6.2.2 DICOM Configuration

The following DICOM parameters are user configurable through the DICOM Network Configuration Dialog:

6.2.2.1 Local DICOM Store Settings - AE Title

The AE Title field is used to configure the Application Entity title for the local DICOM Store SCU application running on the In-Vision. The factory default is “**ESON_STORE_SCU**”.

6.2.2.2 Local DICOM Store Settings - Response Timeout

This field is used to configure the amount of time (in seconds) that the system will wait for a response from the remote DICOM Store SCP server, after an image has been sent. This timer is used to terminate the DICOM association (network connection) if communication between systems cease. The factory default is “**600**”. A value of minus one (-1) entered into this field will mean “Wait forever”. A value of zero (0) entered into this field will mean “Check one time”.

6.2.2.3 Local DICOM Store Settings - Network Timeout

This field is used to configure the DICOM Association Response Timer and other network timeouts. This timer is used to terminate the DICOM association (network connection) if communication between systems cease. The factory default is “**30**”.

6.2.2.4 Remote DICOM Store Settings - AE Title

The AE Title field is used to configure the Application Entity title for the remote DICOM Store SCP application that the In-Vision will be sending images to. The factory default will be “**STORE_SCP**”.

6.2.2.5 Remote DICOM Store Settings - Port Number

This field is used to configure the port number that the remote DICOM Store SCP application will be listening to for messages from In-Vision. The factory default is “**104**”.

6.2.2.6 Remote DICOM Store Settings - Check button

This button is used to test the connection between the DICOM SCU and SCP. The connection is tested using the DICOM C-ECHO service (Verification class).

6.2.3 Transfer Syntax

The transfer syntax used to store images to hard drive and CD and to send images to the remote DICOM Store SCP is configured through the SETTINGS dialog. The SETTINGS Dialog is entered by selecting the “**SET UP**” softkey and the selecting the “**SETTINGS**” softkey. The following transfer syntaxes are supported:

6.2.3.1 RLE lossless

Images are stored using PALETTE COLOR (8 bit) Photometric Interpretation.

6.2.3.2 JPEG lossy

Baseline (using either 6X or 20X compression). Images are stored using YBR_FULL_422 Photometric Interpretation.

6.2.3.3 Uncompressed

Images are stored using PALETTE COLOR (8 bit) Photometric Interpretation. Images are always stored to CD in Explicit VR little endian. Images sent to the DICOM SCP are in either Implicit VR little endian or Explicit VR little endian, based on the negotiated transfer syntax.

Note: Images are stored to hard drive and CD as DICOM Part 10 files. Images that are sent to the remote DICOM SCP always use the transfer syntax that they were originally stored with.

7 Support of Extended Character Sets

The ISO IR 100 specific Character Set is supported.

8 Codes and Controlled Terminologies

The In-Vision Storage SCU AE does not support any addition Codes or Controlled Terminologies.