



***syngo.via* VA11A**

Annex:

syngo.interventional VA10A

AX

DICOM Conformance Statement

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ANNEX syngo.interventional

The syngo.interventional application will create derived single frame XA images derived from original XA multi-frame images. These images are called Store Monitor images, the following tables give an overview of standard and private attributes that will be used in these images.

1 XA Standard Extended SOP Class

The syngo.via will create "screen-shots" (Store Monitor images) from the syngo.interventional application. Those will be encoded as XA Standard extended SOP Class. The same type of images will be created when a multi-frame image is loaded into a viewer and the displayed frame is sent to a remote DICOM node. Please see the following table for complete overview of supplied Type 1/2/3 Standard and Private attributes:

1.1 syngo.interventional "Store Monitor" Image

Table 1 - XA Derived Image (Monochrome) Store Monitor

Attribute Name	Tag	Value
Specific Character Set	(0008,0005)	from original
Image Type	(0008,0008)	"DERIVED\SECONDARY\SINGLE PLANE\SINGLE A(B)\STORE MONITOR"
Instance Creation Date	(0008,0012)	date of creation of Store Monitor
Instance Creation Time	(0008,0013)	time of creation of Store Monitor
SOP Class UID	(0008,0016)	1.2.840.10008.5.1.4.1.1.12.1
SOP Instance UID	(0008,0018)	system generated
Study Date	(0008,0020)	from original
Series Date	(0008,0021)	from original
Acquisition Date	(0008,0022)	from original
Content Date	(0008,0023)	date of creation of Store Monitor or date of processing
Study Time	(0008,0030)	from original
Series Time	(0008,0031)	from original
Acquisition Time	(0008,0032)	from original
Content Time	(0008,0033)	time of creation of Store Monitor or time of processing
Accession Number	(0008,0050)	from original
Modality	(0008,0060)	"XA"
Manufacturer	(0008,0070)	"Siemens"
Institution Name	(0008,0080)	from original
Institution Address	(0008,0081)	from original
Referring Physician's Name	(0008,0090)	from original
Referring Physician Identification Sequence	(0008,0096)	from original
> item contents as provided		from original
Station Name	(0008,1010)	from original
Study Description	(0008,1030)	from original
Procedure Code Sequence	(0008,1032)	from original
> item contents as provided		from original
Series Description	(0008,103E)	from original
Institutional Department Name	(0008,1040)	from original
Physician(s) of Record	(0008,1048)	from original
Physician(s) of Record Identification Sequence	(0008,1049)	from original
> item contents as provided		from original
Performing Physician's Name	(0008,1050)	from original
Referring Physician's Identification Sequence	(0008,1052)	from original

Attribute Name	Tag	Value
> <i>item contents as provided</i>		from original
Name of Physician(s) Reading Study	(0008,1060)	from original
Physician(s) Reading Study Identification Sequence	(0008,1062)	from original
> <i>item contents as provided</i>		from original
Operator's Name	(0008,1070)	from original
Operator Identification Sequence	(0008,1072)	from original
> <i>item contents as provided</i>		from original
Admitting Diagnoses Description	(0008,1080)	from original
Manufacturer's Model Name	(0008,1090)	from original
Referenced Study Sequence	(0008,1110)	from original
>Referenced SOP Class UID	(0008,1150)	from original
>Referenced SOP Instance UID	(0008,1155)	from original
Referenced Patient Sequence	(0008,1120)	from original
>Referenced SOP Class UID	(0008,1150)	from original
>Referenced SOP Instance UID	(0008,1155)	from original
Source Image Sequence	(0008,2112)	from original
>Referenced SOP Class UID	(0008,1150)	"1.2.840.10008.5.1.4.1.1.12.1" (SOP Class of original multi-frame image)
>Referenced SOP Instance UID	(0008,1155)	SOP Instance UID of original multi-frame image
>Referenced Frame Number	(0008,1160)	frame number in original multi-frame image
Patient's Name	(0010,0010)	from original
Patient ID	(0010,0020)	from original
Issuer of Patient ID	(0010,0021)	from original
Patient's Birth Date	(0010,0030)	from original
Patient's Birth Time	(0010,0032)	from original
Patient's Sex	(0010,0040)	from original
Other Patient IDs	(0010,1000)	from original
Other Patient Names	(0010,1001)	from original
Other Patient IDs Sequence	(0010,1002)	from original
> <i>item contents as provided</i>		from original
Patient's Age	(0010,1010)	from original
Patient's Size	(0010,1020)	from original
Patient's Weight	(0010,1030)	from original
Patient's Address	(0010,1040)	from original
Occupation	(0010,2160)	from original
Ethnic Group	(0010,2180)	from original
Additional Patient's History	(0010,21B0)	from original
Patient Comments	(0010,4000)	from original
Patient Identity Removed	(0012,0062)	from original
Contrast Bolus Agent	(0018,0010)	from original
KVP	(0018,0060)	from original
Device Serial Number	(0018,1000)	serial number of device that created the Store Monitor
Software Version	(0018,1020)	from original
Protocol Name	(0018,1030)	from original
Contrast/Bolus Ingredient	(0018,1048)	from original
Distance Source to Detector	(0018,1110)	from original
Distance Source to Patient	(0018,1111)	from original
Estimated Radiographic Magnification Factor	(0018,1114)	from original
Exposure Time	(0018,1150)	from original
X-Ray Tube Current	(0018,1151)	from original
Exposure	(0018,1152)	from original
Average Pulse Width	(0018,1154)	from original
Radiation Setting	(0018,1155)	from original

Attribute Name	Tag	Value
Radiation Mode	(0018,115A)	from original
Image Area Dose Product	(0018,115E)	from original
Intensifier Size	(0018,1162)	from original
Imager Pixel Spacing	(0018,1164)	from original
Focal Spots	(0018,1190)	from original
Positioner Motion	(0018,1500)	from original
Positioner Primary Angle	(0018,1510)	from original
Positioner Secondary Angle	(0018,1511)	from original
Patient Position	(0018,5100)	from original
Detector Description	(0018,7006)	from original
Detector ID	(0018,700A)	from original
Private Creator	(0019,00xx)	"SIEMENS SMS-AX VIEW 1.0"
Private Data	(0019,xxxx)	private data from original Artis image and/or from processing
Study Instance UID	(0020,000D)	from original
Series Instance UID	(0020,000E)	from original
Study ID	(0020,0010)	from original
Series Number	(0020,0011)	from original
Acquisition Number	(0020,0012)	from original
Image Number	(0020,0013)	generated, 300-based number
Patient Orientation	(0020,0020)	from original
Laterality	(0020,0060)	from original
Images in Acquisition	(0020,1002)	from original
Image Comments	(0020,4000)	"SM"
Private Creator	(0021,00xx)	"SIEMENS SMS-AX ACQ 1.0"
Private Data	(0021,xxxx)	private data from original Artis image
Private Creator	(0023,00xx)	"SIEMENS SMS-AX QUANT 1.0"
Private Data	(0023,xxxx)	private data from original Artis image
Private Creator	(0025,00xx)	"SIEMENS SMS-AX ORIGINAL IMAGE INFO 1.0"
Private Data	(0025,xxxx)	private data from original Artis image and/or from processing
Samples per Pixel	(0028,0002)	1
Photometric Interpretation	(0028,0004)	"MONOCHROME2"
Rows	(0028,0010)	from processing
Columns	(0028,0011)	from processing
Bits Allocated	(0028,0100)	from original
Bits Stored	(0028,0101)	from original
High Bit	(0028,0102)	from original
Pixel Representation	(0028,0103)	from original
Pixel Intensity Relationship	(0028,1040)	"DISP"
Window Center	(0028,1050)	from processing
Window Width	(0028,1051)	from processing
VOI LUT Function	(0028,1056)	"LINEAR"
Lossy Image Compression	(0028,2100)	from original
Representative Frame Number	(0028,6010)	"1"
Study ID Issuer	(0032,0012)	from original
Requesting Physician	(0032,1032)	from original
Requesting Service	(0032,1033)	from original
Requested Procedure Description	(0032,1060)	from original
Requested Procedure Code Sequence	(0032,1064)	from original
> item contents as provided		from original
Admission ID	(0038,0010)	from original
Issuer of Admission ID	(0038,0011)	from original
Service Episode ID	(0038,0060)	from original

Attribute Name	Tag	Value
Issuer of Service Episode ID	(0038,0061)	from original
Service Episode Description	(0038,0062)	from original
Performed Procedure Step Start Date	(0040,0244)	from original
Performed Procedure Step Start Time	(0040,0245)	from original
Performed Procedure Step ID	(0040,0253)	from original
Performed Procedure Description	(0040,0254)	from original
Performed Protocol Sequence	(0040,0260)	from original
> <i>item contents as provided</i>		from original
Request Attributes Sequence	(0040,0275)	from original
> <i>item contents as provided</i>		from original
Comments on the Performed Procedure Step	(0040,0280)	from original
Confidentiality Constraint on Patient Data Description	(0040,3001)	from original
Image Horizontal Flip	(0070,0041)	from processing
Image Rotation	(0070,0042)	from processing
Displayed Area Top Left Hand Corner	(0070,0052)	from processing
Displayed Area Bottom Right Hand Corner	(0070,0053)	from processing
Presentation Size Mode	(0070,0100)	"SCALE TO FIT"
Presentation Pixel Spacing	(0070,0101)	derived from original (0008,1164) and (0008,1114)
Presentation Pixel Spacing Magnification Ratio	(0070,0103)	"1"
Storage Media File UID	(0088,0140)	from original
Icon Image Sequence	(0088,0200)	if created: image icon of the Store Monitor
>Samples per Pixel	(0028,0002)	"1"
>Photometric Interpretation	(0028,0004)	"MONOCHROME2"
>Rows	(0028,0010)	"128"
>Columns	(0028,0011)	"128"
>Bits Allocated	(0028,0100)	"8"
>Bits Stored	(0028,0101)	"8"
>High Bit	(0028,0102)	"7"
>Pixel Representation	(0028,0103)	"0"
>Pixel Data	(7FE0,0010)	Pixel Data of image icon
Pixel Data	(7FE0,0010)	Pixel Data of Store Monitor image

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