



DICOM Conformance Statement

SorCom 3.0

Version 1.61

Version history:

Version	Date	Status	Author	Description
0.10	05.10.2001	preliminary	Markku Ojala	Pctm v1.0
1.1	16.01.2002	draft	Markku Ojala	SorCom v2.0
1.2	18.03.2002	ready	Markku Ojala	SorCom 2.1
1.3	29.10.2002	ready	Markku Ojala	SorCom 2.5
1.4	19.12.2002	ready	Markku Ojala	SorCom 2.6

1.5	11.12.2003	ready	Markku Ojala	SorCom 2.7
1.6	30.8.2005	ready	Markku Ojala	SorCom 3.0
1.61	09.05.2006	ready	Chris Bope	AE title changed to SORCOM30

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1. Introduction

This is DICOM conformance statement for SorCom application which supports DICOM Storage Service and Modality Worklist Find service as Service Class User (SCU). SorCom acquires images from Digora pct and Digora fmx imaging plate scanners and ScanoraD, Cranex BaseX D and Cranex Excel D digital x-ray units.

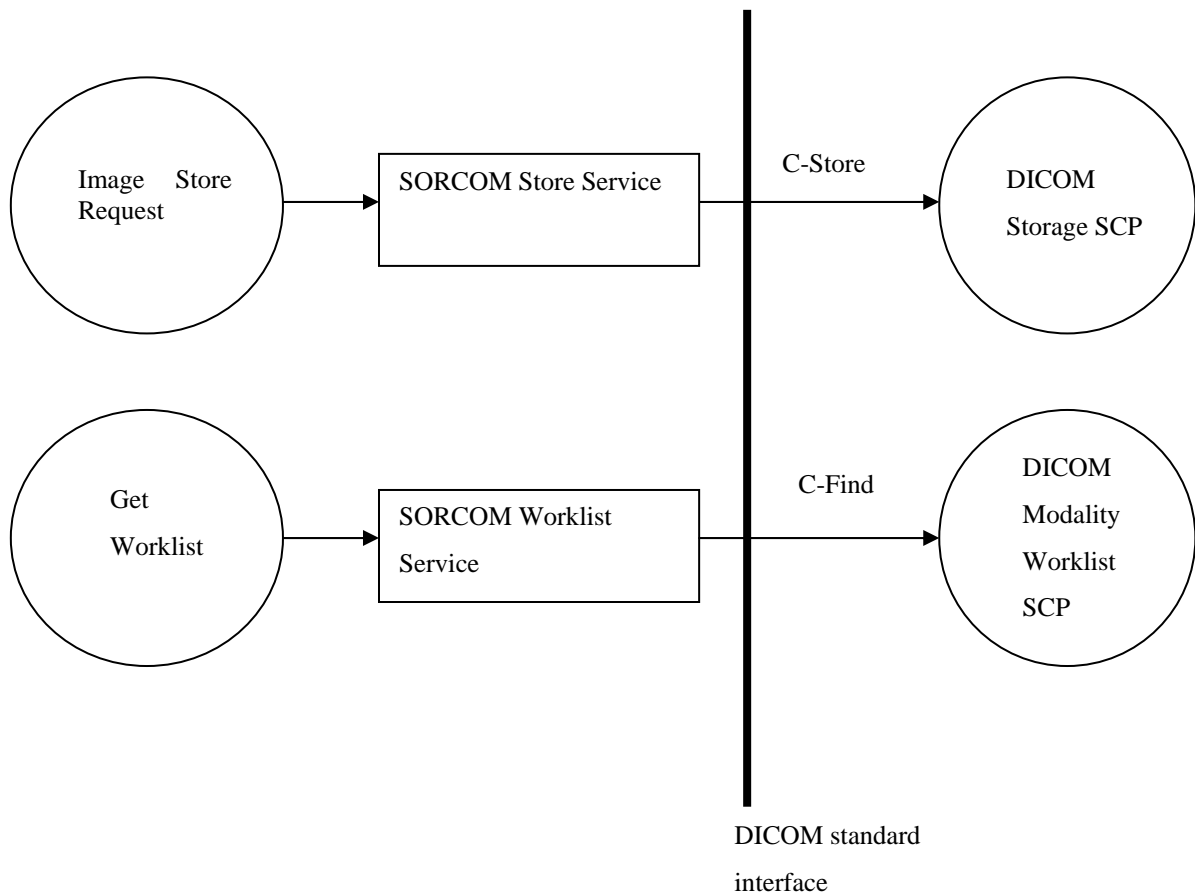
2. Implementation Model

SorCom DICOM application is a single Application Entity titled SORCOM30, where 30 is the current release version number (hereafter SORCOM). It supports the following DICOM Service Classes as an SCU:

- Verification Service Class
- Storage Service Class
- Basic Worklist Management Service Class

SorCom DICOM Application Entity (SORCOM) is implemented as a single Windows NT application process.

2.1. Application Data Flow Diagram



2.2. Functional Definition of Application Entities

The Application Entity SORCOM acts as a SCU for

- Verification
- Storage
- Basic Worklist Management

SOP classes.

2.3. Sequencing of Real-World Activities

Not applicable

3. Application Entity Specifications

SORCOM Application Entity provides Standard Conformance to the following DICOM V3.0 SOP Classes as an SCU:

SOP Class Name	SOP Class UID
Verification	1.2.840.10008.1.1
CR (Computed Radiography) Image Storage	1.2.840.10008.5.1.4.1.1.1
DX (Digital X-Ray for presentation) Image Storage	1.2.840.10008.5.1.4.1.1.1.1
IO (Digital Intra-oral X-Ray for presentation) Image Storage	1.2.840.10008.5.1.4.1.1.1.3
Modality Worklist Information Model -FIND	1.2.840.10008.5.1.4.31

3.1. Association Establishment policies

SORCOM DICOM Service initiates associations for the following activities:

- SorCom user sends studies from SorCom local database to remote archive
- SorCom user gets Modality Worklist from remote information system (HIS/RIS)

3.1.1. General

SORCOM Configuration information in Windows NT registry defines AE title, host name and port number used by SORCOM.

The maximum PDU size is 16384 bytes.

3.1.2. Number of Associations

SORCOM opens one association at a time. Multiple simultaneous associations are not supported.

3.1.3. Asynchronous Nature

SORCOM does not support asynchronous operations and will not perform asynchronous window negotiation.

3.1.4. Implementation Identifying Information

Implementation Class UID is: 1.2.246.512.2.1.2.0

The version name is: PCTM29

3.2. Association Initiation by Real-World Activity

3.2.1. Verify Communication with a Remote System

3.2.1.1. Associated Real-World Activity

SORCOM sends a request to test DICOM communication with the remote system.

3.2.1.2. Proposed Presentation Contexts

Presentation Context Table for Verify Communication with a Remote System					
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	SCU	None

3.2.1.3. SOP Specific Conformance Statement

SORCOM provides standard conformance

3.2.2. Send Images to Remote System

3.2.2.1. Associated Real-World Activity

SORCOM user sends the acquired study and images to the remote system

3.2.2.2. Proposed Presentation Contexts

Presentation Context Table for Send Images to Remote System				
Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
CR Image Storage	1.2.840.10008.5.1.4.1.1.1	See below	SCU	None
DX Image Storage	1.2.840.10008.5.1.4.1.1.1.1	See below	SCU	None
IO Image Storage	1.2.840.10008.5.1.4.1.1.1.3	See below	SCU	None

Transfer Syntaxes for Send Images to Remote System	
Name	UID
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1

3.2.2.3. SOP Specific Conformance Statement

SORCOM provides standard conformance, except for CR Image Storage SOP class:

- Pixel Spacing (0028,0030) is added for the images stored with CR Image Storage SOP class. The information contained is imager (detector) pixel spacing. Appropriate Magnification Factor needs to be applied by the image viewer to convert the value to measure distance in the patient.

3.2.3. Get Modality Worklist from Remote System

3.2.3.1. Associated Real-World Activity

SORCOM user requests Modality Worklist from the remote information system

3.2.3.2. Proposed Presentation Contexts

Presentation Context Table for Get Worklist from Remote System				
Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	UID			
Modality Worklist Information Model -FIND	1.2.840.10008.5.1.4.31	See below	SCU	None

Transfer Syntaxes for Get Worklist from Remote System	
Name	UID
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1

3.2.3.3. SOP Specific Conformance Statement

SORCOM provides standard conformance



3.3. Association Acceptance policy

Not Applicable

4. Communication Profiles

4.1. Supported Communication Stacks

SORCOM provides DICOM V3.0 TCP/IP Network Communication Support as defined in part 8 of the DICOM standard.

4.2. OSI Stack

Not supported.

4.3. TCP/IP Stack

SORCOM uses TCP/IP stack from the Microsoft Windows NT operating system.

4.3.1. Physical Media Support

SORCOM DICOM services are not dependent on the physical medium over which the TCP/IP executes.

4.4. Point-to-Point Stack

Not supported.

5. Extensions/Specializations/Privatizations

5.1. Standard Extended/Specialized/Private SOPs

Not applicable.

5.2. Private Transfer Syntaxes

Not applicable.

6. Configuration

The configuration of SORCOM is stored in Windows NT Registry.

6.1. AE Title/Presentation Address Mapping

The AE title used by SORCOM is configurable and defaults to SORCOM20.

For the systems with which SORCOM acts as SCU, the following information is needed:

- AE title
- IP address
- Port number

6.2. Configurable Parameters

Not applicable.

7. Support of Extended Character Sets

SORCOM support the following character sets:

Name	Value
Default character repertoire	ISO-IR 6
Latin-1 character repertoire	ISO-IR 100

8. Annex A. Modality Worklist Attribute Overview

8.1. Matching Key Attributes

SORCOM supports all combinations of the matching key attributes listed in the next table.

Description	Tag	Matching key type	Matching type
Modality	0008,0060	R	Single
Scheduled Station AE-Title	0040,0001	R	Single
Scheduled Procedure Step Start Date	0040,0002	R	Single, Range

8.2. Return Key Attributes

SORCOM requests the Return Key Attributes listed in the next table.



Description	Tag	Matching key type	Return Key type
SOP Common			
Specific Character Set	0008,0005	O	1C
Scheduled Procedure Step			
Scheduled Procedure Step Sequence	0040,0100	R	1
>Scheduled Station AE-Title	0040,0001	R	1
>Scheduled Procedure Step Start Date	0040,0002	R	1
>Scheduled Procedure Step Start Time	0040,0003	R	1
>Modality	0008,0060	R	1
> Scheduled Procedure Step Description	0040,0007	O	1C
>Scheduled Procedure Step ID	0040,0009	O	1
Requested Procedure			
Requested Procedure ID	0040,1001	O	1
Requested Procedure Description	0032,1060	O	1C
Study Instance UID	00020, 000D	O	1
Imaging Service Request			
Accession Number	0008,0050	O	2
Referring Physicians Name	0008, 0090	O	2
Patient Identification			
Patient's Name	0010,0010	R	1
Patient ID	0010,0020	R	1