

# SwissVision TR4000

DICOM Conformance Statement  
File Media Storage Services

Program Version 9.3 or later  
Document Revision 1.2

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## Document Revision History

<b>Version</b>	<b>Changes</b>	<b>SwissVision</b>	<b>Author</b>	<b>Date</b>
1.0	Preliminary version	V 7.0	E. Ungricht	26.06.00
1.1	DX Storage SOP Class support added	V 8.0 or later	E. Ungricht	08.07.02
1.2	Extended Character Set updated, Added section 4.1.1 File naming convention	V 9.3 or later	M. Darms	22.03.06

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## 0 Introduction

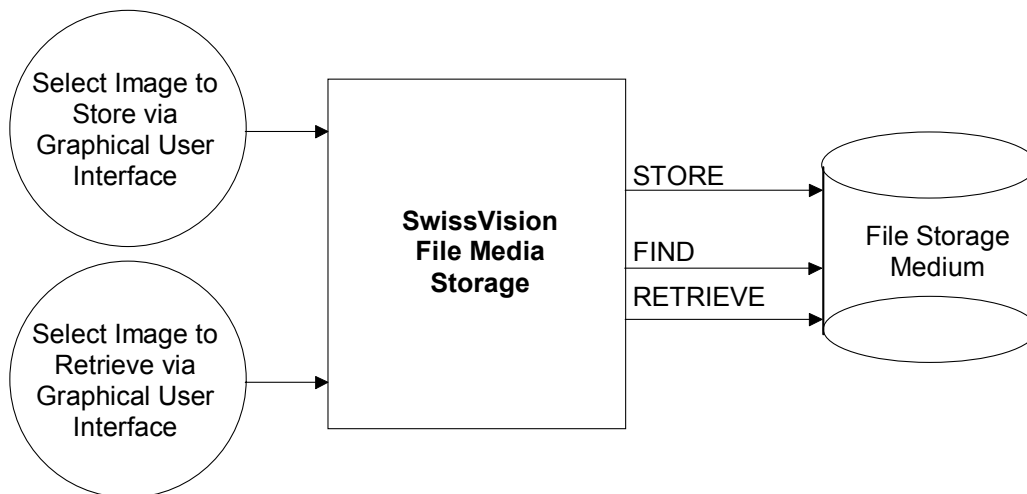
This is the conformance statement for the SwissVision “File Media Storage” application which supports DICOM 3.0 File Media Storage Services. This conformance statement is valid for the SwissVision V 9.3 and higher with the File Media Support option.

## 1 Implementation Model

The SwissVision “File Media Storage” application is an implementation of a DICOM File Media Storage Provider. It is realized using the MergeCOM-3 Advanced Integrator's Tool Kit from Merge Technologies Inc.

### 1.1 Application Data Flow Diagram

Figure 1: SwissVision “File Media Storage” application data flow diagram



### 1.2 Functional Definition of Application Entity (AE)

The SwissVision “File Media Storage” application allows to store and retrieve DICOM images to/from a file storage medium. The images to store or retrieve are selected through the graphical user interface of the application. All image transfer is accomplished utilizing the DICOM protocol.

### 1.3 Sequencing of real-world Activities

Not applicable.

### 1.4 File Meta Information

The implementation class unique identifier (UID) for the SwissVision “File Media Storage” application is:  
**2.16.840.1.113929.1.9.980811**

The implementation version name for the SwissVision “File Media Storage” application is:  
**SwissVision\_1.0**

## 2 AE Specifications

### 2.1 SwissVision “File Media Storage”

The SwissVision “File Media Storage” application provides standard conformance to the DICOM 3.0 Interchange Option of the Media Storage Service Class. The application profiles and roles supported are listed in Table 1.

Table 1: Application Profiles, Activities and Roles for the SwissVision “File Media Storage” application

Application Profile Supported	Identifier	Real World Activity	Role	SC Option
General Purpose CD Image Interchange	STD_GEN_CD	File Media Storage	FSC / FSU	Interchange
		File Media Query	FSR	Interchange
		File Media Retrieve	FSR	Interchange

#### 2.1.1 File Meta Information for the Application Entity

The Application Entity Title is “SVISION\_FMS”.

#### 2.1.2 Real World Activities for the Application Entity

##### 2.1.2.1 Real World Activity: File Media Storage

File Media Storage acts as a File-Set Creator / File-Set Updater (FSC / FSU). It will store the selected images into the selected media directory using the selected user options and configurations.

##### 2.1.2.1.1 Application Profiles for File Media Storage

The application profiles and roles supported are listed in Table 1.

##### 2.1.2.2 Real World Activity: File Media Query

File Media Query acts as a File-Set Reader (FSR). It will read the DICOMDIR from the selected media directory and display the contained information.

##### 2.1.2.2.1 Application Profiles for File Media Query

The application profiles and roles supported are listed in Table 1.

##### 2.1.2.3 Real World Activity: File Media Retrieve

File Media Retrieve acts as a File-Set Reader (FSR). It will read the selected images from the selected media directory.

##### 2.1.2.3.1 Application Profiles for File Media Retrieve

The application profiles and roles supported are listed in Table 1.

## 3 Augmented and Private Profiles

### 3.1 Augmented Profiles

The application supports general purpose image interchange on any media with directory structure, based on the STD\_GEN\_CD application profile.

#### 3.1.1 SOP Class Augmentations

The supported SOP Class IODs are listed in Table 2.

Table 2: IODs and Transfer Syntax for the SwissVision "File Media Storage" application

SOP Class Name	SOP Class UID	Transfer Syntax	Transfer Syntax UID
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	DICOM Implicit VR Little Endian Uncompressed	1.2.840.10008.1.2
Digital X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.1	DICOM Implicit VR Little Endian Uncompressed	1.2.840.10008.1.2
Media Storage Directory Storage	1.2.840.10008.1.3.10	DICOM Implicit VR Little Endian Uncompressed	1.2.840.10008.1.2

### 3.2 Private Profiles

None.

## 4 Extension / Specialization / Privatization

### 4.1 Standard extended / specialized / private SOP's

#### 4.1.1 Image Storage and Retrieval

The SwissVision "File Media Storage" application handles all private attributes which are defined in the SwissVision Storage Services Conformance Statement. All other private tags are ignored.

#### 4.1.1 File naming convention

The stored image files have to be unique the following naming convention (the characters are placeholders):

**YYYYMMDDHHmmSSss.dcm**

Where: *YYYY* is the year, *MM* is the month, *DD* is the day, *HH* are the hour, *mm* are the minutes, *SS* are the seconds and *ss* are the milliseconds, when the image has been stored to media.

For Example: 2006031008562932.dcm

### 4.2 Private Transfer Syntax

None supported.

## 5 Configuration

The maximum allowed media capacity can be entered during setup using the graphical user interface. Default value is 640 MB.

## 6 Character Sets

The SwissVision "File Media Storage" application supports the following character sets:

- ISO\_IR\_100 Latin 1
- ISO\_IR\_101 Latin 2 / Eastern Europe
- ISO\_IR\_109 Latin 3 / Turkish
- ISO\_IR\_110 Latin 4 / Baltic
- ISO\_IR\_126 Greek
- ISO\_IR\_127 Arabic
- ISO\_IR\_138 Hebrew
- ISO\_IR\_144 Cyrillic