Hyland®

ModLink

DICOM Conformance Statement

ENG-ML-DCS-REVC

Date: November 2023

Documentation Notice

Revision History

Date	Rev	Authors	Description
18-APR-2015	A	Chris Leitner	First draft
13-SEP-2022	B	Tammy Matthews	Rebranded for Hyland. Minor formatting changes.
09-SEP-2023	C	Tammy Matthews	Minor typos and formatting changes. Updated Documentation Notice date

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Introduction

This conformance statement is designed to communicate technical information regarding the PACSgear ModLink product and its compliance to the DICOM 3.0 standard. ModLink provides users a simple method of receiving DICOM structured reports and forwarding that data to a voice dictation system.

Implementation Model

Application Data Flow Diagram

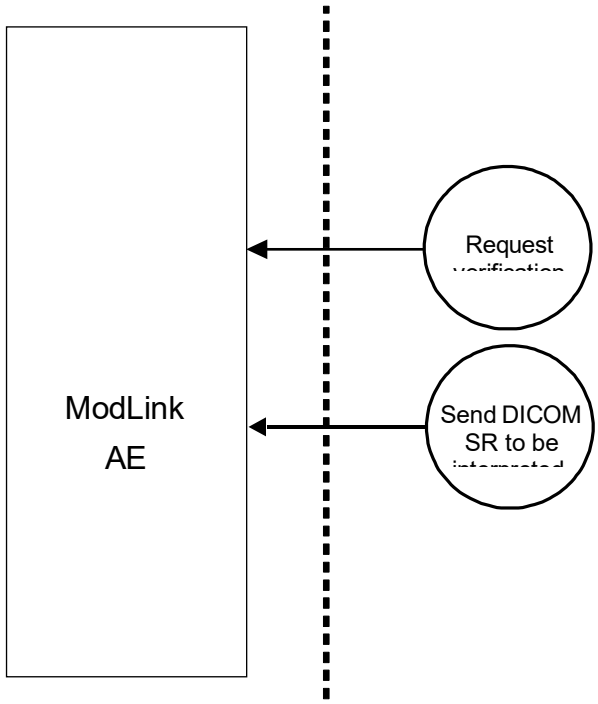

Figure 1. ModLink Implementation Model

ModLink provides users a simple method of receiving DICOM structured reports and forwarding that data to a voice dictation system.

Functional Definition of Application Entity

The ModLink Application Entity (AE) supports the following three SCP functions:

- **Receive Images** – This AE provides the ability to receive and store images as a DICOM Storage SCP.
- **Verify Connectivity** – This AE provides the ability to acknowledge DICOM network connectivity as a DICOM Verification SCP.

Sequencing of Real-World Activities

Not Applicable.

AE Specifications

ModLink AE Specifications

The ModLink AE provides Standard Conformance to the following DICOM 3.0 SOP Classes as an SCP. Note that ModLink does not store any received image files, image SOPs are only supported to allow for modalities that cannot send SR files only.

SOP Class Name	SOP Class UID
Verification	1.2.840.10008.1.1
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3
CR 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
DX Image Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.1
DX Image Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.1.1
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1
MR Image Storage	1.2.840.10008.5.1.4.1.1.4
US Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6
US Image Storage	1.2.840.10008.5.1.4.1.1.6.1
US Multi-Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3
US Multi-Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
SC Image Storage	1.2.840.10008.5.1.4.1.1.7
MG Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.2
MG Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.2.1
Multi-frame True Color Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7.4
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5
NM Image Storage	1.2.840.10008.5.1.4.1.1.20

XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1
RF Image Storage	1.2.840.10008.5.1.4.1.1.12.2
Standard PET Image	1.2.840.10008.5.1.4.1.1.128
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33

Figure 2. ModLink Supported SOP Classes

Association Establishment Policies

General

The maximum PDU size for any association establishment that is offered is 512 Kbytes.

Number of Associations

The ModLink AE can establish up to twenty simultaneous associations.

Asynchronous Nature

The ModLink AE does not support asynchronous communication.

Implementation Identifying Information

The implementation identifying information for this DICOM 3.0 implementation is:

Implementation Class UID	1.3.6.1.4.1.23849.1
Version Name	PACSGEAR_v3

Figure 3. Implementation Identifying Information

Association Establishment Policies

Real-World Activity – Verify Connectivity

The ModLink AE accepts associations for C-Echo and provides standard conformance to the DICOM Verification Service class.

Proposed Presentation Context

Abstract Syntax		**Transfer Syntax**	**Role**	**Extended Negotiation**
Name	**UID**			
Verification	1.2.840.10008.1.2	Implicit VR Little Endian	SCP	None

Figure 4. Proposed Presentation Context – Verify Connectivity

Real-World Activity – Receive Images

Associated Real-World Activity

The ModLink AE accepst associations for C-Storage requests and provides standard conformance to the DICOM Storage Service class for the purpose of data collection and forwarding.

Proposed Presentation Context

Abstract Syntax		Transfer Syntax	Role	Extended Negotiation
Name	**UID**			
CR Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian	SCP	None
Breast Tomo- Synthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3	Implicit VR Little Endian	SCP	None
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian	SCP	None
DX Image Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian	SCP	None
DX Image Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.1.1	Implicit VR Little Endian	SCP	None
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	Implicit VR Little Endian	SCP	None
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian	SCP	None
US Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.6	Implicit VR Little Endian	SCP	None
US Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian	SCP	None
US Multi- Frame Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.3	Implicit VR Little Endian	SCP	None
US Multi- Frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian	SCP	None
SC Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	SCP	None
Multi-frame True Color Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.4	Implicit VR Little Endian	SCP	None
Multi-frame Grayscale Byte Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7.2	Implicit VR Little Endian	SCP	None

MG Storage (Presentation)	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	SCP	None
MG Storage (Raw)	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	SCP	None
NM Image Storage (Retired)	1.2.840.10008.5.1.4.1.1.5	Implicit VR Little Endian	SCP	None
NM Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian	SCP	None
XA Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	SCP	None
RF Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	SCP	None
Standard PET Image	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian	SCP	None
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	Implicit VR Little Endian	SCP	None
Enhanced SR Storage	1.2.840.10008.5.1.4.1.1.88.22	Implicit VR Little Endian	SCP	None
Comp. SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR Little Endian	SCP	None

Figure 5. Proposed Presentation Context – Receive Images

Communication Profiles

Supported Communication Stacks

The ModLink AE provides DICOM 3.0 TCP/IP Network Communication Support as defined in PS 3.8.

TCP/IP Stack

The ModLink AE implements DICOM 3.0 on top of the Windows TCP/IP stack.

Physical Media Support

The ModLink AE is indifferent to the physical medium over which TCP/IP executes.

Extension/Specialization/Privatization

Not Applicable.

Configuration

The following fields are configurable for the ModLink AE:

- Local AE Title
- Local Ports

- Server Timeout Sockets

Extended Character Sets

Not Applicable.