

Ensight™

DICOM Conformance Statement

v2.1



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1 Introduction

1.1 Revision History

| Date | Revision | Description |
|-------------|----------|---|
| 20 Nov 2024 | 01 | Initial release of statement for Ensight v2.1 |

1.2 Terms and Definitions

Informal definitions are provided for the following terms used in this Conformance Statement. The DICOM Standard is the authoritative source for formal definitions of these terms.

Abstract Syntax: the information agreed to be exchanged between applications, generally equivalent to a Service/Object Pair (SOP) Class. Examples: Verification SOP Class, Modality Worklist Information Model Find SOP Class, Computed Radiography Image Storage SOP Class.

Application Entity (AE): an end point of a DICOM information exchange, including the DICOM network or media interface software, i.e., the software that sends or receives DICOM information objects or messages. A single device may have multiple Application Entities.

Application Entity Title: the externally known name of an Application Entity, used to identify a DICOM application to other DICOM applications on the network.

Application Context: the specification of the type of communication used between Application Entities. Example: DICOM network protocol.

Association: a network communication channel set up between Application Entities.

Attribute: a unit of information in an object definition; a data element identified by a tag. The information may be a complex data structure (Sequence), itself composed of lower-level data elements. Examples: Patient ID (0010,0020), Accession Number (0008,0050), Photometric Interpretation (0028,0004), Procedure Code Sequence (0008,1032).

De-Identify/De-Identification (DEID): Ensight term for redaction of header and image pixel data containing Protected Health Information.

Information Object Definition (IOD): the specified set of Attributes that comprise a type of data object; does not represent a specific instance of the data object, but rather a class of similar data objects that have the same properties. The Attributes may be specified as Mandatory (Type 1), Required but possibly unknown (Type 2), or Optional (Type 3), and there may be conditions associated with the use of an Attribute (Types 1C and 2C). Examples: MR Image IOD, CT Image IOD, Print Job IOD.

Joint Photographic Experts Group (JPEG): a set of standardized image compression techniques, available for use by DICOM applications.

Media Application Profile: the specification of DICOM information objects and encoding

Module: a set of Attributes within an Information Object Definition that are logically related to each other. Example: Patient Module includes Patient Name, Patient ID, Patient Birth Date, and Patient Sex.

Negotiation: first phase of Association establishment that allows Application Entities to agree on the types of data to be exchanged and how that data will be encoded.

Presentation Context: the set of DICOM network services used over an Association, as negotiated between Application Entities; includes Abstract Syntaxes and Transfer Syntaxes.

Protocol Data Unit (PDU): a packet (piece) of a DICOM message sent across the network. Devices must specify the maximum size packet they can receive for DICOM messages.

Security Profile: a set of mechanisms, such as encryption, user authentication, or digital signatures, used by an Application Entity to ensure confidentiality, integrity, and/or availability of exchanged DICOM data

Service Class Provider (SCP): role of an Application Entity that provides a DICOM network service; typically, a server that performs operations requested by another Application Entity (Service Class Use.) Examples: Picture Archiving and Communication System (image storage SCP, and image query/retrieve SCP), Radiology Information System (modality worklist SCP).

Service Class User (SCU): role of an Application Entity that uses a DICOM network service; typically, a client. Examples: imaging modality (image storage SCU, and modality worklist SCU), imaging workstation (image query/retrieve SCU)

Service/Object Pair (SOP) Class: the specification of the network or media transfer (service) of a particular type of data (object); the fundamental unit of DICOM interoperability specification. Examples: Ultrasound Image Storage Service, Basic Grayscale Print Management.

Service/Object Pair (SOP) Instance: an information object; a specific occurrence of information exchanged in a SOP Class. Examples: a specific x-ray image.

Standardize/Standardization (STD): Ensite term for normalizing certain tags.

Tag: a 32-bit identifier for a data element, represented as a pair of four digit hexadecimal numbers, the "group" and the "element". If the "group" number is odd, the tag is for a private (manufacturer-specific) data element. Examples: (0010,0020) [Patient ID], (07FE,0010) [Pixel Data], (0019,0210) [private data element]

Transfer Syntax: the encoding used for exchange of DICOM information objects and messages. Examples: JPEG compressed (images), little endian explicit value representation.

Unique Identifier (UID): a globally unique "dotted decimal" string that identifies a specific object or a class of objects; an ISO-8824 Object Identifier. Examples: Study Instance UID, SOP Class UID, SOP Instance UID.

Value Representation (VR): the format type of an individual DICOM data element, such as text, an integer,

a person's name, or a code. DICOM information objects can be transmitted with either explicit identification of the type of each data element (Explicit VR), or without explicit identification (Implicit VR); with Implicit VR, the receiving application must use a DICOM data dictionary to look up the format of each data element.

1.3 Warning Notices

Types of warning notices used in this document include—Caution and Warning. Caution statements warn about the risks of material damage. Warning statements warn about the risks of physical injury.

2 Networking

2.1 Implementation Model

2.1.1 Application Data Flow

The Application Data flow diagrams depict real-world activities performed by Ensight.

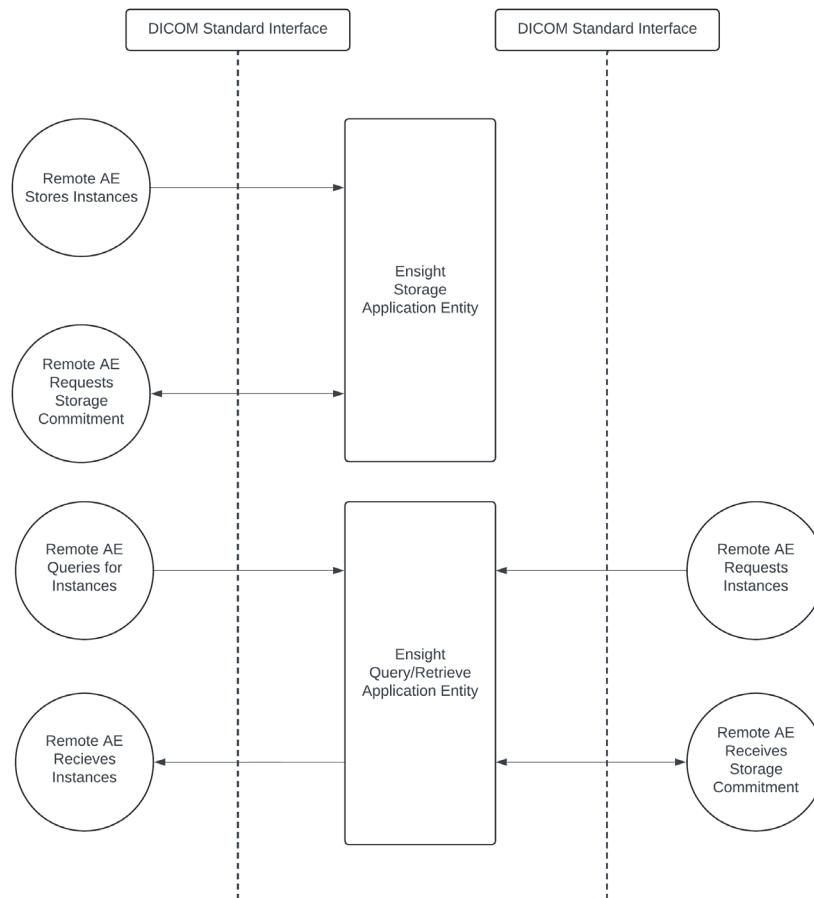


Figure 1 DICOM Data Flow

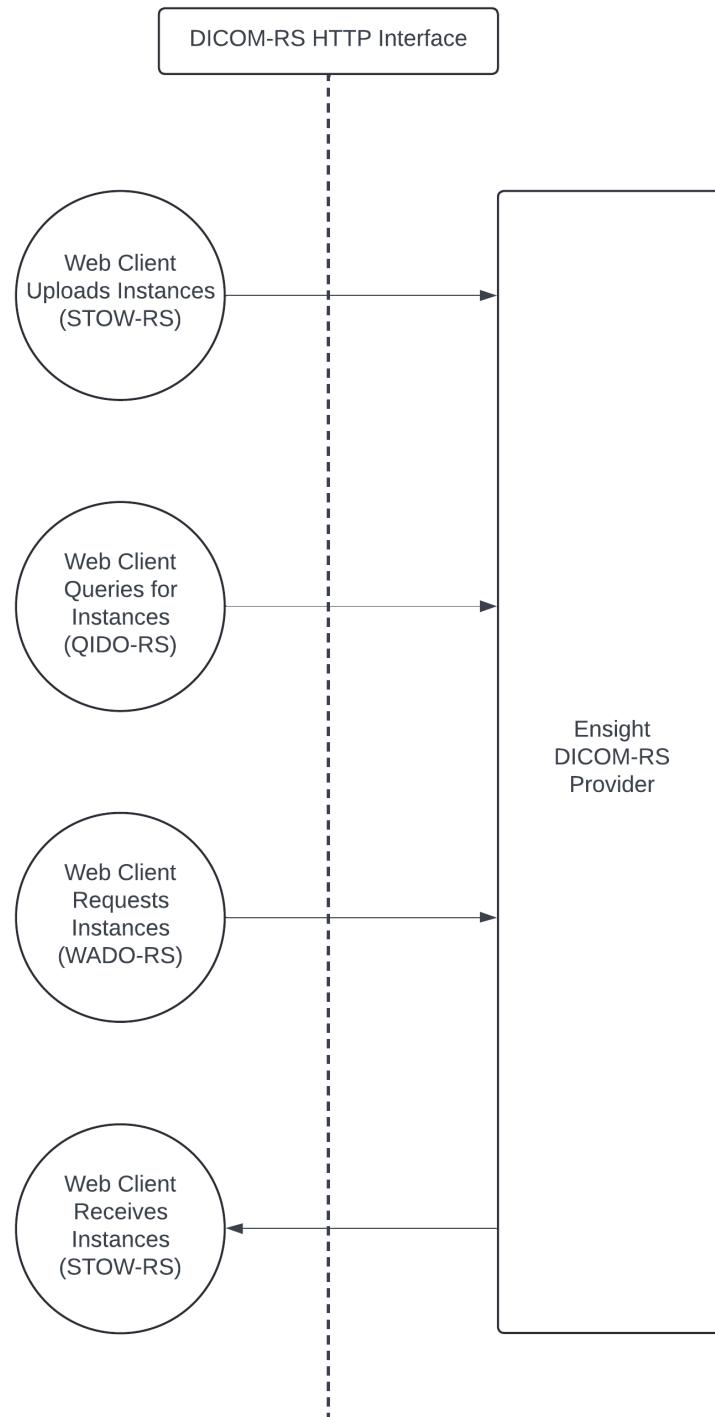


Figure 2 DICOM-RS Data Flow

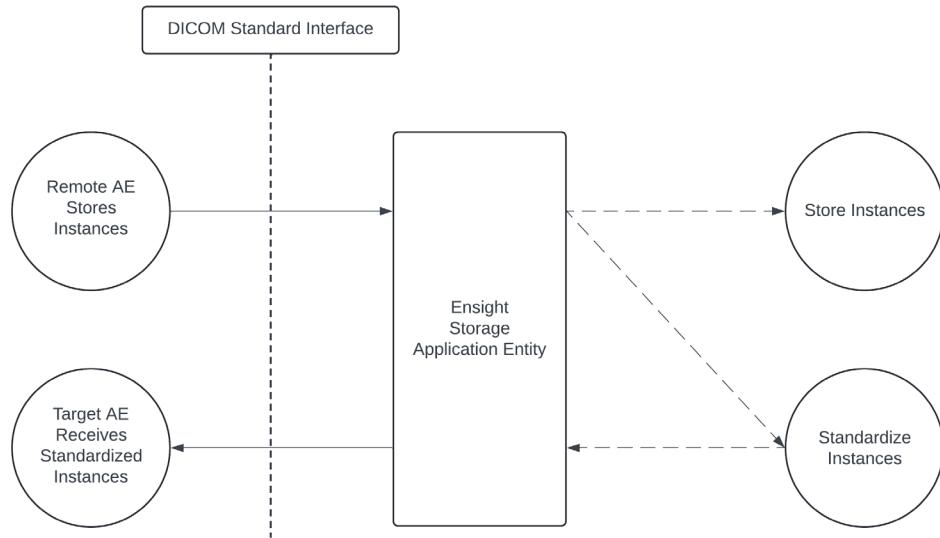


Figure 3 DICOM Study Standardization Data Flow

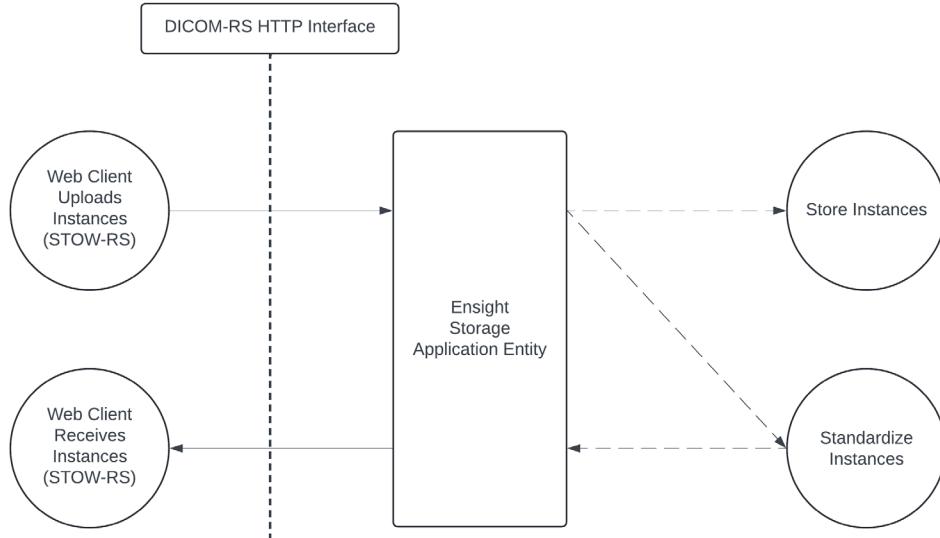


Figure 4 DICOM-RS Study Standardization Data Flow

2.1.2 Functional Definition of Application Entities

The section provides functional details for Ensight Application Entity.

2.1.2.1 Ensight Storage Application Entity

The Ensight Storage AE receives images and instances from remote AEs.

2.1.2.1.1 Store Instances

Ensight will accept remote C-STORE requests to store DICOM instances. Received instances will be indexed in the Database and stored on a filesystem.

2.1.2.1.2 Standardize Instances

Ensight can take ingested instances and perform inference against them to update Study and Series Description with normalized (“standardized”) values.

2.1.2.1.3 De-Identify Instances

2.1.2.1.4 Ensight can take ingested instances and perform redaction of Protected Health Information (PHI.)

2.1.2.1.5 Storage Commitment

Ensight will accept remote Storage Commitment requests and send back a Commitment Confirmation.

2.1.2.2 Ensight Query/Retrieve Application Entity

Ensight Q/R AE processes queries for Patient, Study, Series, and Instances located in its cache.

2.1.2.2.1 Find Instances

Ensight will accept C-FIND requests initiated by remote AEs and respond. C-FIND requests are satisfied with data held in the Ensight database.

2.1.2.2.2 Move Instances

Ensight will accept C-MOVE requests initiated by remote AEs and, if applicable, initiate C-STORE requests to push instances in its cache to the specified remote AE.

2.2 AE Specification

2.2.1 Storage Application Entity Specification

2.2.1.1 SOP Classes

Ensight Storage AE provides Standard Conformance to the following SOP Classes:

| SOP Class | SOP Class UID | SCU | SCP | STD |
|--|-------------------------------|-----|-----|-----|
| Verification | | | | |
| Verification SOP Class | 1.2.840.10008.1.1 | Yes | Yes | No |
| Storage Commitment Push Model SOP Class | 1.2.840.10008.1.20.1 | No | Yes | No |
| Image Storage SOP Classes | | | | |
| Computed Radiography Image Storage | 1.2.840.10008.5.1.4.1.1.1 | No | Yes | Yes |
| Digital X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.1 | No | Yes | Yes |
| Digital X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.1.1 | No | Yes | No |
| Digital Mammography X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.2 | No | Yes | No |

| | | | | |
|--|-----------------------------------|----|-----|-----|
| Digital Mammography X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.2 .1 | No | Yes | No |
| Digital Intra-Oral X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.3 | No | Yes | No |
| Digital Intra-Oral X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.3 .1 | No | Yes | No |
| CT Image Storage | 1.2.840.10008.5.1.4.1.1.2 | No | Yes | Yes |
| Enhanced CT Image Storage | 1.2.840.10008.5.1.4.1.1.2.1 | No | Yes | No |
| Legacy Converted Enhanced CT Image Storage | 1.2.840.10008.5.1.4.1.1.2.2 | No | Yes | No |
| Ultrasound Multi-frame Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.3 | No | Yes | No |
| Ultrasound Multi-frame Image Storage | 1.2.840.10008.5.1.4.1.1.3.1 | No | Yes | No |
| MR Image Storage | 1.2.840.10008.5.1.4.1.1.4 | No | Yes | Yes |
| Enhanced MR Image Storage | 1.2.840.10008.5.1.4.1.1.4.1 | No | Yes | No |
| Enhanced MR Color Image Storage | 1.2.840.10008.5.1.4.1.1.4.3 | No | Yes | No |
| Legacy Converted Enhanced MR Image Storage | 1.2.840.10008.5.1.4.1.1.4.4 | No | Yes | No |
| Nuclear Medicine Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.5 | No | Yes | No |
| Ultrasound Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.6 | No | Yes | No |
| Ultrasound Image Storage | 1.2.840.10008.5.1.4.1.1.6.1 | No | Yes | No |
| Enhanced US Volume Storage | 1.2.840.10008.5.1.4.1.1.6.2 | No | Yes | No |
| Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7 | No | Yes | No |
| Multi-frame Grayscale Byte Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.2 | No | Yes | No |
| Multi-frame Grayscale Word Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.3 | No | Yes | No |
| Multi-frame True Color Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.4 | No | Yes | No |
| X-Ray Angiographic Image Storage | 1.2.840.10008.5.1.4.1.1.12. 1 | No | Yes | No |

| | | | | |
|---|--------------------------------|----|-----|----|
| Enhanced XA Image Storage | 1.2.840.10008.5.1.4.1.1.12.1.1 | No | Yes | No |
| X-Ray Radiofluoroscopic Image Storage | 1.2.840.10008.5.1.4.1.1.12.2 | No | Yes | No |
| Enhanced XRF Image Storage | 1.2.840.10008.5.1.4.1.1.12.2.1 | No | Yes | No |
| X-Ray Angiographic Bi-Plane Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.12.3 | No | Yes | No |
| X-Ray 3D Angiographic Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.1 | No | Yes | No |
| X-Ray 3D Craniofacial Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.2 | No | Yes | No |
| Breast Tomosynthesis Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.3 | No | Yes | No |
| Breast Projection X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.13.1.4 | No | Yes | No |
| Breast Projection X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.13.1.5 | No | Yes | No |
| Intravascular Optical Coherence Tomography Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.14.1 | No | Yes | No |
| Intravascular Optical Coherence Tomography Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.14.2 | No | Yes | No |
| Nuclear Medicine Image Storage | 1.2.840.10008.5.1.4.1.1.20 | No | Yes | No |
| VL Image Storage - Trial (Retired) | 1.2.840.10008.5.1.4.1.1.77.1 | No | Yes | No |
| VL Multi-frame Image Storage - Trial (Retired) | 1.2.840.10008.5.1.4.1.1.77.2 | No | Yes | No |
| VL Endoscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.1 | No | Yes | No |
| VL Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.2 | No | Yes | No |
| VL Slide-Coordinates Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.3 | No | Yes | No |

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|--|--------------------------------------|----|-----|----|
| VL Photographic Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.4 | No | Yes | No |
| Ophthalmic Photography 8 Bit Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.1 | No | Yes | No |
| Ophthalmic Photography 16 Bit Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.2 | No | Yes | No |
| Ophthalmic Tomography Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.4 | No | Yes | No |
| Wide Field Ophthalmic Photography Stereographic Projection Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.5 | No | Yes | No |
| Wide Field Ophthalmic Photography 3D Coordinates Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.6 | No | Yes | No |
| Ophthalmic Optical Coherence Tomography EnFace Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.7 | No | Yes | No |
| Ophthalmic Optical Coherence Tomography Bscan Volume Analysis Storage | 1.2.840.10008.5.1.4.1.1.77. 1.5.8 | No | Yes | No |
| VL Whole Slide Microscopy Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.6 | No | Yes | No |
| Dermoscopic Photography Image Storage | 1.2.840.10008.5.1.4.1.1.77. 1.7 | No | Yes | No |
| Ophthalmic Thickness Map Storage | 1.2.840.10008.5.1.4.1.1.81. 1 | No | Yes | No |
| Corneal Topography Map Storage | 1.2.840.10008.5.1.4.1.1.82. 1 | No | Yes | No |
| Positron Emission Tomography Image Storage | 1.2.840.10008.5.1.4.1.1.12 8 | No | Yes | No |
| Legacy Converted Enhanced PET Image Storage | 1.2.840.10008.5.1.4.1.1.12 8.1 | No | Yes | No |
| Enhanced PET Image Storage | 1.2.840.10008.5.1.4.1.1.13 0 | No | Yes | No |
| RT Image Storage | 1.2.840.10008.5.1.4.1.1.48 1.1 | No | Yes | No |
| Private Fuji CR Image Storage | 1.2.392.200036.9125.1.1.2 | No | Yes | No |

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|--|----------------------------------|----|-----|----|
| Private GE Dicom CT Image Info Object | 1.2.840.113619.4.3 | No | Yes | No |
| Private GE Dicom Display Image Info Object | 1.2.840.113619.4.4 | No | Yes | No |
| Private GE Dicom MR Image Info Object | 1.2.840.113619.4.2 | No | Yes | No |
| Private Philips CT Synthetic Image Storage | 1.3.46.670589.5.0.9 | No | Yes | No |
| Private Philips CX Image Storage | 1.3.46.670589.2.4.1.1 | No | Yes | No |
| Private Philips CX Synthetic Image Storage | 1.3.46.670589.5.0.12 | No | Yes | No |
| Private Philips MR Color Image Storage | 1.3.46.670589.11.0.0.12.3 | No | Yes | No |
| Private Philips MR Synthetic Image Storage | 1.3.46.670589.5.0.10 | No | Yes | No |
| Private Philips Perfusion Image Storage | 1.3.46.670589.5.0.14 | No | Yes | No |
| Private PixelMed Floating Point Image Storage | 1.3.6.1.4.1.5962.301.9 | No | Yes | No |
| Private PixelMed Legacy Converted Enhanced CT Image Storage | 1.3.6.1.4.1.5962.301.1 | No | Yes | No |
| Private PixelMed Legacy Converted Enhanced MR Image Storage | 1.3.6.1.4.1.5962.301.2 | No | Yes | No |
| Private PixelMed Legacy Converted Enhanced PET Image Storage | 1.3.6.1.4.1.5962.301.3 | No | Yes | No |
| Private PMOD Multi-frame Image Storage | 2.16.840.1.114033.5.1.4.1.1.130 | No | Yes | No |
| Private Toshiba US Image Storage | 1.2.392.200036.9116.7.8.1.1.1 | No | Yes | No |
| Video Storage SOP Classes | | | | |
| Video Endoscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.1.1 | No | Yes | No |
| Video Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.2.1 | No | Yes | No |
| Video Photographic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.4.1 | No | Yes | No |

| Structured Report Storage SOP Classes | | | | |
|--|-------------------------------|----|-----|----|
| Spectacle Prescription Report Storage | 1.2.840.10008.5.1.4.1.1.78.6 | No | Yes | No |
| Macular Grid Thickness and Volume Report Storage | 1.2.840.10008.5.1.4.1.1.79.1 | No | Yes | No |
| Basic Text SR Storage | 1.2.840.10008.5.1.4.1.1.88.11 | No | Yes | No |
| Enhanced SR Storage | 1.2.840.10008.5.1.4.1.1.88.22 | No | Yes | No |
| Comprehensive SR Storage | 1.2.840.10008.5.1.4.1.1.88.33 | No | Yes | No |
| Comprehensive 3D SR Storage | 1.2.840.10008.5.1.4.1.1.88.34 | No | Yes | No |
| Extensible SR Storage | 1.2.840.10008.5.1.4.1.1.88.35 | No | Yes | No |
| Procedure Log Storage | 1.2.840.10008.5.1.4.1.1.88.40 | No | Yes | No |
| Mammography CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.50 | No | Yes | No |
| Key Object Selection Document Storage | 1.2.840.10008.5.1.4.1.1.88.59 | No | Yes | No |
| Chest CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.65 | No | Yes | No |
| X-Ray Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88.67 | No | Yes | No |
| Radiopharmaceutical Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88.68 | No | Yes | No |
| Colon CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.69 | No | Yes | No |
| Implantation Plan SR Storage | 1.2.840.10008.5.1.4.1.1.88.70 | No | Yes | No |
| Acquisition Context SR Storage | 1.2.840.10008.5.1.4.1.1.88.71 | No | Yes | No |

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|--|-----------------------------------|----|-----|----|
| Simplified Adult Echo SR Storage | 1.2.840.10008.5.1.4.1.1.88. 72 | No | Yes | No |
| Patient Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88. 73 | No | Yes | No |
| Planned Imaging Agent Administration SR Storage | 1.2.840.10008.5.1.4.1.1.88. 74 | No | Yes | No |
| Performed Imaging Agent Administration SR Storage | 1.2.840.10008.5.1.4.1.1.88. 75 | No | Yes | No |
| Other SOP Classes | | | | |
| Stored Print Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.27 | No | Yes | No |
| Hardcopy Grayscale Image Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.29 | No | Yes | No |
| Hardcopy Color Image Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.30 | No | Yes | No |
| MR Spectroscopy Storage | 1.2.840.10008.5.1.4.1.1.4.2 | No | Yes | No |
| Multi-frame Single Bit Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.1 | No | Yes | No |
| Standalone Overlay Storage Retired | 1.2.840.10008.5.1.4.1.1.8 | No | Yes | No |
| Standalone Curve Storage Retired | 1.2.840.10008.5.1.4.1.1.9 | No | Yes | No |
| 12-lead ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1 .1 | No | Yes | No |
| General ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1 .2 | No | Yes | No |
| Ambulatory ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1 .3 | No | Yes | No |
| Hemodynamic Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.2 .1 | No | Yes | No |
| Cardiac Electrophysiology Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.3 .1 | No | Yes | No |
| Basic Voice Audio Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.4 .1 | No | Yes | No |

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|--|--------------------------------|----|-----|----|
| General Audio Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.4 .2 | No | Yes | No |
| Arterial Pulse Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.5 .1 | No | Yes | No |
| Respiratory Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.6 .1 | No | Yes | No |
| Multi-channel Respiratory Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.6 .2 | No | Yes | No |
| Routine Scalp Electroencephalogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7 .1 | No | Yes | No |
| Electromyogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7 .2 | No | Yes | No |
| Electrooculogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7 .3 | No | Yes | No |
| Sleep Electroencephalogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7 .4 | No | Yes | No |
| Body Position Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.8 .1 | No | Yes | No |
| Standalone Modality LUT Storage Retired | 1.2.840.10008.5.1.4.1.1.10 | No | Yes | No |
| Standalone VOI LUT Storage Retired | 1.2.840.10008.5.1.4.1.1.11 | No | Yes | No |
| Grayscale Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.1 | No | Yes | No |
| Color Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.2 | No | Yes | No |
| Pseudo-Color Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.3 | No | Yes | No |
| Blending Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.4 | No | Yes | No |
| XA/XRF Grayscale Softcopy Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.5 | No | Yes | No |
| Grayscale Planar MPR Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.6 | No | Yes | No |
| Compositing Planar MPR Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.7 | No | Yes | No |

| | | | | |
|--|----------------------------------|----|-----|----|
| Advanced Blending Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.8 | No | Yes | No |
| Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.9 | No | Yes | No |
| Segmented Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.10 | No | Yes | No |
| Multiple Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.11 | No | Yes | No |
| Parametric Map Storage | 1.2.840.10008.5.1.4.1.1.30 | No | Yes | No |
| Raw Data Storage | 1.2.840.10008.5.1.4.1.1.66 | No | Yes | No |
| Spatial Registration Storage | 1.2.840.10008.5.1.4.1.1.66.1 | No | Yes | No |
| Spatial Fiducials Storage | 1.2.840.10008.5.1.4.1.1.66.2 | No | Yes | No |
| Deformable Spatial Registration Storage | 1.2.840.10008.5.1.4.1.1.66.3 | No | Yes | No |
| Segmentation Storage | 1.2.840.10008.5.1.4.1.1.66.4 | No | Yes | No |
| Surface Segmentation Storage | 1.2.840.10008.5.1.4.1.1.66.5 | No | Yes | No |
| Tractography Results Storage | 1.2.840.10008.5.1.4.1.1.66.6 | No | Yes | No |
| Real World Value Mapping Storage | 1.2.840.10008.5.1.4.1.1.67 | No | Yes | No |
| Surface Scan Mesh Storage | 1.2.840.10008.5.1.4.1.1.68.1 | No | Yes | No |
| Surface Scan Point Cloud Storage | 1.2.840.10008.5.1.4.1.1.68.2 | No | Yes | No |
| Stereometric Relationship Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.3 | No | Yes | No |
| Lensometry Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.1 | No | Yes | No |
| Autorefraction Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.2 | No | Yes | No |

| | | | | |
|---|--------------------------------|----|-----|----|
| Keratometry Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.3 | No | Yes | No |
| Subjective Refraction Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.4 | No | Yes | No |
| Visual Acuity Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.5 | No | Yes | No |
| Ophthalmic Axial Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.7 | No | Yes | No |
| Intraocular Lens Calculations Storage | 1.2.840.10008.5.1.4.1.1.78.8 | No | Yes | No |
| Ophthalmic Visual Field Static Perimetry Measurements Storage | 1.2.840.10008.5.1.4.1.1.80.1 | No | Yes | No |
| BasicStructuredDisplayStorage | 1.2.840.10008.5.1.4.1.1.13.1 | No | Yes | No |
| Encapsulated PDF Storage | 1.2.840.10008.5.1.4.1.1.10.4.1 | No | Yes | No |
| Encapsulated CDA Storage | 1.2.840.10008.5.1.4.1.1.10.4.2 | No | Yes | No |
| Encapsulated STL Storage | 1.2.840.10008.5.1.4.1.1.10.4.3 | No | Yes | No |
| Encapsulated OBJ Storage | 1.2.840.10008.5.1.4.1.1.10.4.4 | No | Yes | No |
| Encapsulated MTL Storage | 1.2.840.10008.5.1.4.1.1.10.4.5 | No | Yes | No |
| Standalone PET Curve Storage (Retired) | 1.2.840.10008.5.1.4.1.1.12.9 | No | Yes | No |
| Text SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.1 | No | Yes | No |
| Audio SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.2 | No | Yes | No |
| Detail SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.3 | No | Yes | No |
| Comprehensive SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.4 | No | Yes | No |

| | | | | |
|---|---------------------------------|----|-----|----|
| Content Assessment Results Storage | 1.2.840.10008.5.1.4.1.1.90.1 | No | Yes | No |
| CT Performed Procedure Protocol Storage | 1.2.840.10008.5.1.4.1.1.20.2 | No | Yes | No |
| XA Performed Procedure Protocol Storage | 1.2.840.10008.5.1.4.1.1.20.8 | No | Yes | No |
| RT Dose Storage | 1.2.840.10008.5.1.4.1.1.48.1.2 | No | Yes | No |
| RT Structure Set Storage | 1.2.840.10008.5.1.4.1.1.48.1.3 | No | Yes | No |
| RT Beams Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.48.1.4 | No | Yes | No |
| RT Plan Storage | 1.2.840.10008.5.1.4.1.1.48.1.5 | No | Yes | No |
| RT Brachy Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.48.1.6 | No | Yes | No |
| RT Treatment Summary Record Storage | 1.2.840.10008.5.1.4.1.1.48.1.7 | No | Yes | No |
| RT Ion Plan Storage | 1.2.840.10008.5.1.4.1.1.48.1.8 | No | Yes | No |
| RT Ion Beams Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.48.1.9 | No | Yes | No |
| RT Physician Intent Storage | 1.2.840.10008.5.1.4.1.1.48.1.10 | No | Yes | No |
| RT Segment Annotation Storage | 1.2.840.10008.5.1.4.1.1.48.1.11 | No | Yes | No |
| RT Radiation Set Storage | 1.2.840.10008.5.1.4.1.1.48.1.12 | No | Yes | No |
| C-Arm Photon-Electron Radiation Storage | 1.2.840.10008.5.1.4.1.1.48.1.13 | No | Yes | No |
| Tomotherapeutic Radiation Storage | 1.2.840.10008.5.1.4.1.1.48.1.14 | No | Yes | No |
| Robotic-Arm Radiation Storage | 1.2.840.10008.5.1.4.1.1.48.1.15 | No | Yes | No |

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|--|------------------------------------|----|-----|----|
| RT Radiation Record Set Storage | 1.2.840.10008.5.1.4.1.1.48 1.16 | No | Yes | No |
| RT Radiation Salvage Record Storage | 1.2.840.10008.5.1.4.1.1.48 1.17 | No | Yes | No |
| Tomotherapeutic Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.48 1.18 | No | Yes | No |
| C-Arm Photon-Electron Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.48 1.19 | No | Yes | No |
| Robotic Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.48 1.20 | No | Yes | No |
| RT Beams Delivery Instruction Storage | 1.2.840.10008.5.1.4.34.7 | No | Yes | No |
| RT Brachy Application Setup Delivery Instruction Storage | 1.2.840.10008.5.1.4.34.10 | No | Yes | No |
| Private Agfa Arrival Transaction | 1.2.124.113532.3500.8.1 | No | Yes | No |
| Private Agfa Basic Attribute Presentation State | 1.2.124.113532.3500.7 | No | Yes | No |
| Private Agfa Dictation Transaction | 1.2.124.113532.3500.8.2 | No | Yes | No |
| Private Agfa Report Approval Transaction | 1.2.124.113532.3500.8.4 | No | Yes | No |
| Private Agfa Report Transcription Transaction | 1.2.124.113532.3500.8.3 | No | Yes | No |
| Private ERAD Practice Builder Report Dictation Storage | 1.2.826.0.1.3680043.293.1. 0.2 | No | Yes | No |
| Private ERAD Practice Builder Report Text Storage | 1.2.826.0.1.3680043.293.1. 0.1 | No | Yes | No |
| Private GE 3D Model Storage | 1.2.840.113619.4.26 | No | Yes | No |
| Private GE Collage Storage | 1.2.528.1.1001.5.1.1.1 | No | Yes | No |
| Private GE eNTEGRA Protocol or NM Genie Storage | 1.2.840.113619.4.27 | No | Yes | No |
| Private GE PET Raw Data Storage | 1.2.840.113619.4.30 | No | Yes | No |
| Private GE RT Plan Storage | 1.2.840.113619.4.5.249 | No | Yes | No |
| Private Philips 3D Object Storage | 1.3.46.670589.5.0.2.1 | No | Yes | No |

| | | | | |
|--|--------------------------------|----|-----|----|
| Private Philips 3D Object Storage (Retired) | 1.3.46.670589.5.0.2 | No | Yes | No |
| Private Philips 3D Presentation State Storage | 1.3.46.670589.2.5.1.1 | No | Yes | No |
| Private Philips Composite Object Storage | 1.3.46.670589.5.0.4 | No | Yes | No |
| Private Philips HP Live 3D 01 Storage | 1.2.840.113543.6.6.1.3.100 01 | No | Yes | No |
| Private Philips HP Live 3D 02 Storage | 1.2.840.113543.6.6.1.3.100 02 | No | Yes | No |
| Private Philips Live Run Storage | 1.3.46.670589.7.8.1618510 092 | No | Yes | No |
| Private Philips MR Cardio Analysis Storage | 1.3.46.670589.5.0.11.1 | No | Yes | No |
| Private Philips MR Cardio Analysis Storage (Retired) | 1.3.46.670589.5.0.11 | No | Yes | No |
| Private Philips MR Cardio Profile Storage | 1.3.46.670589.5.0.7 | No | Yes | No |
| Private Philips MR Cardio Storage | 1.3.46.670589.5.0.8.1 | No | Yes | No |
| Private Philips MR Cardio Storage (Retired) | 1.3.46.670589.5.0.8 | No | Yes | No |
| Private Philips MR Examcard Storage | 1.3.46.670589.11.0.0.12.4 | No | Yes | No |
| Private Philips MR Series Data Storage | 1.3.46.670589.11.0.0.12.2 | No | Yes | No |
| Private Philips MR Spectrum Storage | 1.3.46.670589.11.0.0.12.1 | No | Yes | No |
| Private Philips Perfusion Storage | 1.3.46.670589.5.0.13 | No | Yes | No |
| Private Philips Reconstruction Storage | 1.3.46.670589.7.8.1618510 0130 | No | Yes | No |
| Private Philips Run Storage | 1.3.46.670589.7.8.1618510 0129 | No | Yes | No |
| Private Philips Specialised XA Storage | 1.3.46.670589.2.3.1.1 | No | Yes | No |
| Private Philips Surface Storage | 1.3.46.670589.5.0.3.1 | No | Yes | No |
| Private Philips Surface Storage (Retired) | 1.3.46.670589.5.0.3 | No | Yes | No |
| Private Philips Volume Set Storage | 1.3.46.670589.2.11.1.1 | No | Yes | No |

| | | | | |
|--|----------------------------------|----|-----|----|
| Private Philips Volume Storage | 1.3.46.670589.5.0.1.1 | No | Yes | No |
| Private Philips Volume Storage (Retired) | 1.3.46.670589.5.0.1 | No | Yes | No |
| Private Philips VRML Storage | 1.3.46.670589.2.8.1.1 | No | Yes | No |
| Private Philips X-Ray MF Storage | 1.3.46.670589.7.8.1618510 091 | No | Yes | No |
| Private Siemens AX Frame Sets Storage | 1.3.12.2.1107.5.99.3.11 | No | Yes | No |
| Private Siemens CSA Non Image Storage | 1.3.12.2.1107.5.9.1 | No | Yes | No |
| Private Siemens CT MR Volume Storage | 1.3.12.2.1107.5.99.3.10 | No | Yes | No |
| Private TomTec Annotation Storage | 1.2.276.0.48.5.1.4.1.1.7 | No | Yes | No |

2.2.1.2 Association Policies

2.2.1.2.1 General

Ensight AE can accept and propose Association Requests. Ensight will accept Association Requests for Verification, Query/Retrieve, Storage and Storage Commitment Push Model Services.

The following DICOM Standard Application Context Name is accepted and proposed:

| | |
|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

2.2.1.2.2 Number of Association

Ensight AE can support multiple Associations requested by remote AEs. The maximum number of concurrent Associations is configurable and set to 'unlimited' by default.

Ensight AE can initiate up to 5 Associations for sending Storage Commitment Push Model to remote AEs

| | |
|--|---------------------------|
| Max concurrent Associations initiated by remote AEs | No Maximum (Configurable) |
| Max concurrent Associations initiated by Ensight for Storage Commitment Push Model to remote AEs | 5 |

2.2.1.2.3 Asynchronous Nature

Ensight AE supports asynchronous communications. The maximum number of asynchronous transactions is configurable and set to 'unlimited' by default.

| | |
|-------------------------------|---------------------------|
| Max asynchronous transactions | No Maximum (Configurable) |
|-------------------------------|---------------------------|

2.2.1.2.4 Implementation Identifying Information

The implementation information identifying this AE is:

| | |
|-----------------------------|------------------|
| Implementation Class UID | 1.2.40.0.13.1.3 |
| Implementation Version Name | dcm4che-5.27.2-e |

2.2.1.3 Association Initiation Policies

The Ensight Storage AE initiates associations for the following real-world activities:

- Move Standardized objects to the Remote Target AE

2.2.1.4 Association Acceptance Policy

2.2.1.4.1 Real-World Activity - Receive Images for Standardization and Commitment Requests

2.2.1.4.1.1 Accepted Presentation Contexts

The Ensight Storage AE will accept Presentation Contexts for all SOP Classes listed in the “Ensight Storage Application Entity Specification” sections.

The Ensight Storage AE will accept Presentation Contexts for Standardization only for specific SOP Classes listed in the “Ensight Storage Application Entity Specification” sections.

The default list of accepted Transfer Syntaxes for each Abstract Syntax is defined below:

| Presentation Context Table | | | | | |
|---|----------------------|--|-------------------|------|---------------|
| Abstract Syntax | | Transfer Syntax | | Role | Extended Neg. |
| Name | UID | Name | UID | | |
| Verification | 1.2.840.10008.1.1 | Implicit VR LittleEndian | 1.2.840.10008.1.2 | SCP | None |
| Storage Commit Push Model | 1.2.840.10008.1.20.1 | Implicit VR LittleEndian | 1.2.840.10008.1.2 | SCP | None |
| Image Storage SOP Classes listed in “Storage AE Spec” | | see: Transfer Syntaxes for Image Storage | | SCP | None |
| Video Storage SOP Classes listed in “Storage AE Spec” | | see: Transfer Syntaxes for Video Storage | | SCP | None |
| SR Storage SOP Classes listed in “Storage AE | | see: Transfer Syntaxes for SR | | SCP | None |

| | | | |
|---|--|-----|------|
| Spec" | Storage | | |
| Other Storage SOP Classes listed in "Storage AE Spec" | see: Transfer Syntaxes for Other Storage | SCP | None |

Accepted Presentation Contexts of Ensight Storage AE

| Transfer Syntax Name | UID |
|--|------------------------|
| Implicit VR Little Endian | 1.2.840.10008.1.2 |
| Explicit VR Little Endian | 1.2.840.10008.1.2.1 |
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| JPEG Extended (Process 2 & 4) | 1.2.840.10008.1.2.4.51 |
| JPEG Lossless, Non-Hierarchical (Process 14) | 1.2.840.10008.1.2.4.54 |
| JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1]) | 1.2.840.10008.1.2.4.70 |
| JPEG-LS Lossless | 1.2.840.10008.1.2.4.80 |
| JPEG-LS Lossy (Near-Lossless) | 1.2.840.10008.1.2.4.81 |
| JPEG 2000 (Lossless Only) | 1.2.840.10008.1.2.4.90 |
| JPEG 2000 | 1.2.840.10008.1.2.4.91 |
| RLE Lossless | 1.2.840.10008.1.2.5 |

Transfer Syntaxes for Image Storage

| Transfer Syntax Name | UID |
|---|-------------------------|
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| MPEG2 Main Profile @ Main Level | 1.2.840.10008.1.2.4.100 |
| MPEG2 Main Profile @ High Level | 1.2.840.10008.1.2.4.101 |
| MPEG-4 AVC/H.264 High Profile / Level 4.1 | 1.2.840.10008.1.2.4.102 |
| MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1 | 1.2.840.10008.1.2.4.103 |

| | |
|--|-------------------------|
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 2D Video | 1.2.840.10008.1.2.4.104 |
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 3D Video | 1.2.840.10008.1.2.4.105 |
| MPEG-4 AVC/H.264 Stereo High Profile / Level 4.2 | 1.2.840.10008.1.2.4.106 |

Transfer Syntaxes for Video Storage

| Transfer Syntax Name | UID |
|-----------------------------------|------------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |
| Deflated Explicit VR LittleEndian | 1.2.840.10008.1.2.1.99 |

Transfer Syntaxes for SR Storage

| Transfer Syntax Name | UID |
|--------------------------|---------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |

Transfer Syntaxes for Other Storage

2.2.2 Query/Retrieve Application Entity Specification

2.2.2.1 SOP Classes

Ensight Query/Retrieve AE provides Standard Conformance to the following SOP Classes:

| SOP Class | SOP Class UID | SCU | SCP |
|--|-----------------------------|-----|-----|
| Verification SOP Class | 1.2.840.10008.1.1 | Yes | Yes |
| Patient Root Query/Retrieve Information Model - FIND | 1.2.840.10008.5.1.4.1.2.1.1 | No | Yes |
| Patient Root Query/Retrieve Information Model - MOVE | 1.2.840.10008.5.1.4.1.2.1.2 | No | Yes |
| Patient Root Query/Retrieve Information | 1.2.840.10008.5.1.4.1.2.1.3 | No | Yes |

| | | | |
|--|-----------------------------|-----|-----|
| Model - GET | | | |
| Study Root Query/Retrieve Information Model - FIND | 1.2.840.10008.5.1.4.1.2.2.1 | Yes | Yes |
| Study Root Query/Retrieve Information Model - MOVE | 1.2.840.10008.5.1.4.1.2.2.2 | Yes | Yes |
| Study Root Query/Retrieve Information Model - GET | 1.2.840.10008.5.1.4.1.2.2.3 | No | Yes |

Image Storage SOP Classes

| | | | |
|--|-------------------------------|-----|----|
| Computed Radiography Image Storage | 1.2.840.10008.5.1.4.1.1.1 | Yes | No |
| Digital X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.1 | Yes | No |
| Digital X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.1.1 | Yes | No |
| Digital Mammography X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.2 | Yes | No |
| Digital Mammography X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.2.1 | Yes | No |
| Digital Intra-Oral X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.1.3 | Yes | No |
| Digital Intra-Oral X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.1.3.1 | Yes | No |
| CT Image Storage | 1.2.840.10008.5.1.4.1.1.2 | Yes | No |
| Enhanced CT Image Storage | 1.2.840.10008.5.1.4.1.1.2.1 | Yes | No |
| Legacy Converted Enhanced CT Image Storage | 1.2.840.10008.5.1.4.1.1.2.2 | Yes | No |
| Ultrasound Multi-frame Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.3 | Yes | No |
| Ultrasound Multi-frame Image Storage | 1.2.840.10008.5.1.4.1.1.3.1 | Yes | No |
| MR Image Storage | 1.2.840.10008.5.1.4.1.1.4 | Yes | No |
| Enhanced MR Image Storage | 1.2.840.10008.5.1.4.1.1.4.1 | Yes | No |
| Enhanced MR Color Image Storage | 1.2.840.10008.5.1.4.1.1.4.3 | Yes | No |

| | | | |
|---|--------------------------------|-----|----|
| Legacy Converted Enhanced MR Image Storage | 1.2.840.10008.5.1.4.1.1.4.4 | Yes | No |
| Nuclear Medicine Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.5 | Yes | No |
| Ultrasound Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.6 | Yes | No |
| Ultrasound Image Storage | 1.2.840.10008.5.1.4.1.1.6.1 | Yes | No |
| Enhanced US Volume Storage | 1.2.840.10008.5.1.4.1.1.6.2 | Yes | No |
| Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7 | Yes | No |
| Multi-frame Grayscale Byte Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.2 | Yes | No |
| Multi-frame Grayscale Word Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.3 | Yes | No |
| Multi-frame True Color Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.4 | Yes | No |
| X-Ray Angiographic Image Storage | 1.2.840.10008.5.1.4.1.1.12.1 | Yes | No |
| Enhanced XA Image Storage | 1.2.840.10008.5.1.4.1.1.12.1.1 | Yes | No |
| X-Ray Radiofluoroscopic Image Storage | 1.2.840.10008.5.1.4.1.1.12.2 | Yes | No |
| Enhanced XRF Image Storage | 1.2.840.10008.5.1.4.1.1.12.2.1 | Yes | No |
| X-Ray Angiographic Bi-Plane Image Storage (Retired) | 1.2.840.10008.5.1.4.1.1.12.3 | Yes | No |
| X-Ray 3D Angiographic Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.1 | Yes | No |
| X-Ray 3D Craniofacial Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.2 | Yes | No |
| Breast Tomosynthesis Image Storage | 1.2.840.10008.5.1.4.1.1.13.1.3 | Yes | No |
| Breast Projection X-Ray Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.13.1.4 | Yes | No |
| Breast Projection X-Ray Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.13.1.5 | Yes | No |
| Intravascular Optical Coherence Tomography Image Storage - For Presentation | 1.2.840.10008.5.1.4.1.1.14.1 | Yes | No |

| | | | |
|---|----------------------------------|-----|----|
| Intravascular Optical Coherence Tomography Image Storage - For Processing | 1.2.840.10008.5.1.4.1.1.14.2 | Yes | No |
| Nuclear Medicine Image Storage | 1.2.840.10008.5.1.4.1.1.20 | Yes | No |
| VL Image Storage - Trial (Retired) | 1.2.840.10008.5.1.4.1.1.77.1 | Yes | No |
| VL Multi-frame Image Storage - Trial (Retired) | 1.2.840.10008.5.1.4.1.1.77.2 | Yes | No |
| VL Endoscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.1 | Yes | No |
| VL Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.2 | Yes | No |
| VL Slide-Coordinates Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.3 | Yes | No |
| VL Photographic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.4 | Yes | No |
| Ophthalmic Photography 8 Bit Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.1 | Yes | No |
| Ophthalmic Photography 16 Bit Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.2 | Yes | No |
| Ophthalmic Tomography Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.4 | Yes | No |
| Wide Field Ophthalmic Photography Stereographic Projection Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.5 | Yes | No |
| Wide Field Ophthalmic Photography 3D Coordinates Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.6 | Yes | No |
| Ophthalmic Optical Coherence Tomography EnFace Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.7 | Yes | No |
| Ophthalmic Optical Coherence Tomography Bscan Volume Analysis Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.8 | Yes | No |
| VL Whole Slide Microscopy Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.6 | Yes | No |
| Dermoscopic Photography Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.7 | Yes | No |
| Ophthalmic Thickness Map Storage | 1.2.840.10008.5.1.4.1.1.81.1 | Yes | No |
| Corneal Topography Map Storage | 1.2.840.10008.5.1.4.1.1.82.1 | Yes | No |

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|--|---------------------------------|-----|----|
| Positron Emission Tomography Image Storage | 1.2.840.10008.5.1.4.1.1.128 | Yes | No |
| Legacy Converted Enhanced PET Image Storage | 1.2.840.10008.5.1.4.1.1.128.1 | Yes | No |
| Enhanced PET Image Storage | 1.2.840.10008.5.1.4.1.1.130 | Yes | No |
| RT Image Storage | 1.2.840.10008.5.1.4.1.1.481.1 | Yes | No |
| Private Fuji CR Image Storage | 1.2.392.200036.9125.1.1.2 | Yes | No |
| Private GE Dicom CT Image Info Object | 1.2.840.113619.4.3 | Yes | No |
| Private GE Dicom Display Image Info Object | 1.2.840.113619.4.4 | Yes | No |
| Private GE Dicom MR Image Info Object | 1.2.840.113619.4.2 | Yes | No |
| Private Philips CT Synthetic Image Storage | 1.3.46.670589.5.0.9 | Yes | No |
| Private Philips CX Image Storage | 1.3.46.670589.2.4.1.1 | Yes | No |
| Private Philips CX Synthetic Image Storage | 1.3.46.670589.5.0.12 | Yes | No |
| Private Philips MR Color Image Storage | 1.3.46.670589.11.0.0.12.3 | Yes | No |
| Private Philips MR Synthetic Image Storage | 1.3.46.670589.5.0.10 | Yes | No |
| Private Philips Perfusion Image Storage | 1.3.46.670589.5.0.14 | Yes | No |
| Private PixelMed Floating Point Image Storage | 1.3.6.1.4.1.5962.301.9 | Yes | No |
| Private PixelMed Legacy Converted Enhanced CT Image Storage | 1.3.6.1.4.1.5962.301.1 | Yes | No |
| Private PixelMed Legacy Converted Enhanced MR Image Storage | 1.3.6.1.4.1.5962.301.2 | Yes | No |
| Private PixelMed Legacy Converted Enhanced PET Image Storage | 1.3.6.1.4.1.5962.301.3 | Yes | No |
| Private PMOD Multi-frame Image Storage | 2.16.840.1.114033.5.1.4.1.1.130 | Yes | No |
| Private Toshiba US Image Storage | 1.2.392.200036.9116.7.8.1.1.1 | Yes | No |

| Video Storage SOP Classes | | | |
|--|----------------------------------|-----|----|
| Video Endoscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.1.1 | Yes | No |
| Video Microscopic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.2.1 | Yes | No |
| Video Photographic Image Storage | 1.2.840.10008.5.1.4.1.1.77.1.4.1 | Yes | No |
| Structured Report Storage SOP Classes | | | |
| Spectacle Prescription Report Storage | 1.2.840.10008.5.1.4.1.1.78.6 | Yes | No |
| Macular Grid Thickness and Volume Report Storage | 1.2.840.10008.5.1.4.1.1.79.1 | Yes | No |
| Basic Text SR Storage | 1.2.840.10008.5.1.4.1.1.88.11 | Yes | No |
| Enhanced SR Storage | 1.2.840.10008.5.1.4.1.1.88.22 | Yes | No |
| Comprehensive SR Storage | 1.2.840.10008.5.1.4.1.1.88.33 | Yes | No |
| Comprehensive 3D SR Storage | 1.2.840.10008.5.1.4.1.1.88.34 | Yes | No |
| Extensible SR Storage | 1.2.840.10008.5.1.4.1.1.88.35 | Yes | No |
| Procedure Log Storage | 1.2.840.10008.5.1.4.1.1.88.40 | Yes | No |
| Mammography CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.50 | Yes | No |
| Key Object Selection Document Storage | 1.2.840.10008.5.1.4.1.1.88.59 | Yes | No |
| Chest CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.65 | Yes | No |
| X-Ray Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88.67 | Yes | No |
| Radiopharmaceutical Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88.68 | Yes | No |
| Colon CAD SR Storage | 1.2.840.10008.5.1.4.1.1.88.69 | Yes | No |
| Implantation Plan SR Storage | 1.2.840.10008.5.1.4.1.1.88.70 | Yes | No |
| Acquisition Context SR Storage | 1.2.840.10008.5.1.4.1.1.88.71 | Yes | No |
| Simplified Adult Echo SR Storage | 1.2.840.10008.5.1.4.1.1.88.72 | Yes | No |
| Patient Radiation Dose SR Storage | 1.2.840.10008.5.1.4.1.1.88.73 | Yes | No |

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| Planned Imaging Agent Administration SR Storage | 1.2.840.10008.5.1.4.1.1.88.74 | Yes | No |
| Performed Imaging Agent Administration SR Storage | 1.2.840.10008.5.1.4.1.1.88.75 | Yes | No |
| Other SOP Classes | | | |
| Stored Print Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.27 | Yes | No |
| Hardcopy Grayscale Image Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.29 | Yes | No |
| Hardcopy Color Image Storage SOP Class (Retired) | 1.2.840.10008.5.1.1.30 | Yes | No |
| MR Spectroscopy Storage | 1.2.840.10008.5.1.4.1.1.4.2 | Yes | No |
| Multi-frame Single Bit Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.1 | Yes | No |
| Standalone Overlay Storage Retired | 1.2.840.10008.5.1.4.1.1.8 | Yes | No |
| Standalone Curve Storage Retired | 1.2.840.10008.5.1.4.1.1.9 | Yes | No |
| 12-lead ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1.1 | Yes | No |
| General ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1.2 | Yes | No |
| Ambulatory ECG Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.1.3 | Yes | No |
| Hemodynamic Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.2.1 | Yes | No |
| Cardiac Electrophysiology Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.3.1 | Yes | No |
| Basic Voice Audio Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.4.1 | Yes | No |
| General Audio Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.4.2 | Yes | No |
| Arterial Pulse Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.5.1 | Yes | No |
| Respiratory Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.6.1 | Yes | No |
| Multi-channel Respiratory Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.6.2 | Yes | No |
| Routine Scalp Electroencephalogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7.1 | Yes | No |
| Electromyogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7.2 | Yes | No |

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| Electrooculogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7.3 | Yes | No |
| Sleep Electroencephalogram Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.7.4 | Yes | No |
| Body Position Waveform Storage | 1.2.840.10008.5.1.4.1.1.9.8.1 | Yes | No |
| Standalone Modality LUT Storage Retired | 1.2.840.10008.5.1.4.1.1.10 | Yes | No |
| Standalone VOI LUT Storage Retired | 1.2.840.10008.5.1.4.1.1.11 | Yes | No |
| Grayscale Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.1 | Yes | No |
| Color Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.2 | Yes | No |
| Pseudo-Color Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.3 | Yes | No |
| Blending Softcopy Presentation State Storage SOP Class | 1.2.840.10008.5.1.4.1.1.11.4 | Yes | No |
| XA/XRF Grayscale Softcopy Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.5 | Yes | No |
| Grayscale Planar MPR Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.6 | Yes | No |
| Compositing Planar MPR Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.7 | Yes | No |
| Advanced Blending Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.8 | Yes | No |
| Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.9 | Yes | No |
| Segmented Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.10 | Yes | No |
| Multiple Volume Rendering Volumetric Presentation State Storage | 1.2.840.10008.5.1.4.1.1.11.11 | Yes | No |
| Parametric Map Storage | 1.2.840.10008.5.1.4.1.1.30 | Yes | No |
| Raw Data Storage | 1.2.840.10008.5.1.4.1.1.66 | Yes | No |
| Spatial Registration Storage | 1.2.840.10008.5.1.4.1.1.66.1 | Yes | No |

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|---|----------------------------------|-----|----|
| Spatial Fiducials Storage | 1.2.840.10008.5.1.4.1.1.66.2 | Yes | No |
| Deformable Spatial Registration Storage | 1.2.840.10008.5.1.4.1.1.66.3 | Yes | No |
| Segmentation Storage | 1.2.840.10008.5.1.4.1.1.66.4 | Yes | No |
| Surface Segmentation Storage | 1.2.840.10008.5.1.4.1.1.66.5 | Yes | No |
| Tractography Results Storage | 1.2.840.10008.5.1.4.1.1.66.6 | Yes | No |
| Real World Value Mapping Storage | 1.2.840.10008.5.1.4.1.1.67 | Yes | No |
| Surface Scan Mesh Storage | 1.2.840.10008.5.1.4.1.1.68.1 | Yes | No |
| Surface Scan Point Cloud Storage | 1.2.840.10008.5.1.4.1.1.68.2 | Yes | No |
| Stereometric Relationship Storage | 1.2.840.10008.5.1.4.1.1.77.1.5.3 | Yes | No |
| Lensometry Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.1 | Yes | No |
| Autorefraction Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.2 | Yes | No |
| Keratometry Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.3 | Yes | No |
| Subjective Refraction Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.4 | Yes | No |
| Visual Acuity Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.5 | Yes | No |
| Ophthalmic Axial Measurements Storage | 1.2.840.10008.5.1.4.1.1.78.7 | Yes | No |
| Intraocular Lens Calculations Storage | 1.2.840.10008.5.1.4.1.1.78.8 | Yes | No |
| Ophthalmic Visual Field Static Perimetry Measurements Storage | 1.2.840.10008.5.1.4.1.1.80.1 | Yes | No |
| BasicStructuredDisplayStorage | 1.2.840.10008.5.1.4.1.1.131 | Yes | No |
| Encapsulated PDF Storage | 1.2.840.10008.5.1.4.1.1.104.1 | Yes | No |
| Encapsulated CDA Storage | 1.2.840.10008.5.1.4.1.1.104.2 | Yes | No |
| Encapsulated STL Storage | 1.2.840.10008.5.1.4.1.1.104.3 | Yes | No |
| Encapsulated OBJ Storage | 1.2.840.10008.5.1.4.1.1.104.4 | Yes | No |
| Encapsulated MTL Storage | 1.2.840.10008.5.1.4.1.1.104.5 | Yes | No |
| Standalone PET Curve Storage (Retired) | 1.2.840.10008.5.1.4.1.1.129 | Yes | No |

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| Text SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.1 | Yes | No |
| Audio SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.2 | Yes | No |
| Detail SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.3 | Yes | No |
| Comprehensive SR Storage Trial (Retired) | 1.2.840.10008.5.1.4.1.1.88.4 | Yes | No |
| Content Assessment Results Storage | 1.2.840.10008.5.1.4.1.1.90.1 | Yes | No |
| CT Performed Procedure Protocol Storage | 1.2.840.10008.5.1.4.1.1.200.2 | Yes | No |
| XA Performed Procedure Protocol Storage | 1.2.840.10008.5.1.4.1.1.200.8 | Yes | No |
| RT Dose Storage | 1.2.840.10008.5.1.4.1.1.481.2 | Yes | No |
| RT Structure Set Storage | 1.2.840.10008.5.1.4.1.1.481.3 | Yes | No |
| RT Beams Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.481.4 | Yes | No |
| RT Plan Storage | 1.2.840.10008.5.1.4.1.1.481.5 | Yes | No |
| RT Brachy Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.481.6 | Yes | No |
| RT Treatment Summary Record Storage | 1.2.840.10008.5.1.4.1.1.481.7 | Yes | No |
| RT Ion Plan Storage | 1.2.840.10008.5.1.4.1.1.481.8 | Yes | No |
| RT Ion Beams Treatment Record Storage | 1.2.840.10008.5.1.4.1.1.481.9 | Yes | No |
| RT Physician Intent Storage | 1.2.840.10008.5.1.4.1.1.481.10 | Yes | No |
| RT Segment Annotation Storage | 1.2.840.10008.5.1.4.1.1.481.11 | Yes | No |
| RT Radiation Set Storage | 1.2.840.10008.5.1.4.1.1.481.12 | Yes | No |
| C-Arm Photon-Electron Radiation Storage | 1.2.840.10008.5.1.4.1.1.481.13 | Yes | No |
| Tomotherapeutic Radiation Storage | 1.2.840.10008.5.1.4.1.1.481.14 | Yes | No |
| Robotic-Arm Radiation Storage | 1.2.840.10008.5.1.4.1.1.481.15 | Yes | No |
| RT Radiation Record Set Storage | 1.2.840.10008.5.1.4.1.1.481.16 | Yes | No |
| RT Radiation Salvage Record Storage | 1.2.840.10008.5.1.4.1.1.481.17 | Yes | No |

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| Tomotherapeutic Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.481.18 | Yes | No |
| C-Arm Photon-Electron Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.481.19 | Yes | No |
| Robotic Radiation Record Storage | 1.2.840.10008.5.1.4.1.1.481.20 | Yes | No |
| RT Beams Delivery Instruction Storage | 1.2.840.10008.5.1.4.34.7 | Yes | No |
| RT Brachy Application Setup Delivery Instruction Storage | 1.2.840.10008.5.1.4.34.10 | Yes | No |
| Private Agfa Arrival Transaction | 1.2.124.113532.3500.8.1 | Yes | No |
| Private Agfa Basic Attribute Presentation State | 1.2.124.113532.3500.7 | Yes | No |
| Private Agfa Dictation Transaction | 1.2.124.113532.3500.8.2 | Yes | No |
| Private Agfa Report Approval Transaction | 1.2.124.113532.3500.8.4 | Yes | No |
| Private Agfa Report Transcription Transaction | 1.2.124.113532.3500.8.3 | Yes | No |
| Private ERAD Practice Builder Report Dictation Storage | 1.2.826.0.1.3680043.293.1.0.2 | Yes | No |
| Private ERAD Practice Builder Report Text Storage | 1.2.826.0.1.3680043.293.1.0.1 | Yes | No |
| Private GE 3D Model Storage | 1.2.840.113619.4.26 | Yes | No |
| Private GE Collage Storage | 1.2.528.1.1001.5.1.1.1 | Yes | No |
| Private GE eNTEGRA Protocol or NM Genie Storage | 1.2.840.113619.4.27 | Yes | No |
| Private GE PET Raw Data Storage | 1.2.840.113619.4.30 | Yes | No |
| Private GE RT Plan Storage | 1.2.840.113619.4.5.249 | Yes | No |
| Private Philips 3D Object Storage | 1.3.46.670589.5.0.2.1 | Yes | No |
| Private Philips 3D Object Storage (Retired) | 1.3.46.670589.5.0.2 | Yes | No |
| Private Philips 3D Presentation State Storage | 1.3.46.670589.2.5.1.1 | Yes | No |

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|--|-------------------------------|-----|----|
| Private Philips Composite Object Storage | 1.3.46.670589.5.0.4 | Yes | No |
| Private Philips HP Live 3D 01 Storage | 1.2.840.113543.6.6.1.3.10001 | Yes | No |
| Private Philips HP Live 3D 02 Storage | 1.2.840.113543.6.6.1.3.10002 | Yes | No |
| Private Philips Live Run Storage | 1.3.46.670589.7.8.1618510092 | Yes | No |
| Private Philips MR Cardio Analysis Storage | 1.3.46.670589.5.0.11.1 | Yes | No |
| Private Philips MR Cardio Analysis Storage (Retired) | 1.3.46.670589.5.0.11 | Yes | No |
| Private Philips MR Cardio Profile Storage | 1.3.46.670589.5.0.7 | Yes | No |
| Private Philips MR Cardio Storage | 1.3.46.670589.5.0.8.1 | Yes | No |
| Private Philips MR Cardio Storage (Retired) | 1.3.46.670589.5.0.8 | Yes | No |
| Private Philips MR Examcard Storage | 1.3.46.670589.11.0.0.12.4 | Yes | No |
| Private Philips MR Series Data Storage | 1.3.46.670589.11.0.0.12.2 | Yes | No |
| Private Philips MR Spectrum Storage | 1.3.46.670589.11.0.0.12.1 | Yes | No |
| Private Philips Perfusion Storage | 1.3.46.670589.5.0.13 | Yes | No |
| Private Philips Reconstruction Storage | 1.3.46.670589.7.8.16185100130 | Yes | No |
| Private Philips Run Storage | 1.3.46.670589.7.8.16185100129 | Yes | No |
| Private Philips Specialised XA Storage | 1.3.46.670589.2.3.1.1 | Yes | No |
| Private Philips Surface Storage | 1.3.46.670589.5.0.3.1 | Yes | No |
| Private Philips Surface Storage (Retired) | 1.3.46.670589.5.0.3 | Yes | No |
| Private Philips Volume Set Storage | 1.3.46.670589.2.11.1.1 | Yes | No |
| Private Philips Volume Storage | 1.3.46.670589.5.0.1.1 | Yes | No |
| Private Philips Volume Storage (Retired) | 1.3.46.670589.5.0.1 | Yes | No |
| Private Philips VRML Storage | 1.3.46.670589.2.8.1.1 | Yes | No |
| Private Philips X-Ray MF Storage | 1.3.46.670589.7.8.1618510091 | Yes | No |

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|---------------------------------------|--------------------------|-----|----|
| Private Siemens AX Frame Sets Storage | 1.3.12.2.1107.5.99.3.11 | Yes | No |
| Private Siemens CSA Non Image Storage | 1.3.12.2.1107.5.9.1 | Yes | No |
| Private Siemens CT MR Volume Storage | 1.3.12.2.1107.5.99.3.10 | Yes | No |
| Private TomTec Annotation Storage | 1.2.276.0.48.5.1.4.1.1.7 | Yes | No |

2.2.2.2 Association Policies

2.2.2.2.1 General

The following DICOM Standard Application Context Name is accepted and proposed:

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|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

2.2.2.2.2 Number of Association

| | |
|--|---------------------------|
| Max concurrent Associations initiated by remote AEs | No Maximum (Configurable) |
| Max concurrent Associations initiated by Query/Retrieve AE | No Maximum |

2.2.2.2.3 Asynchronous Nature

Ensight Query/Retrieve AE supports asynchronous communications. The maximum number of asynchronous transactions is configurable and set to 'unlimited' by default.

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| Max asynchronous transactions | No Maximum (Configurable) |
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2.2.2.2.4 Implementation Identifying Information

The implementation information identifying this AE is:

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| Implementation Class UID | 1.2.40.0.13.1.3 |
| Implementation Version Name | dcm4che-5.27.0 |

2.2.2.3 Association Initiation Policy

2.2.2.3.1 Proposed Presentation Contexts

The Query/Retrieve Application Entity will propose Presentation Contexts for Verification, Study Root Query/Retrieve Information Model - FIND, Study Root Query/Retrieve Information Model - MOVE and of supported Storage SOP Classes.

| Presentation Context Table | | | | | |
|--|--|---------------------------|-------------------|------|---------------|
| Abstract Syntax | | Transfer Syntax | | Role | Extended Neg. |
| Name | UID | Name | UID | | |
| Verification | 1.2.840.10008.1.1 | Implicit VR Little Endian | 1.2.840.10008.1.2 | SCU | None |
| Study Root Query/Retrieve Information Model - FIND | 1.2.840.10008.5.1.4. 1.2.2.1 | Implicit VR Little Endian | 1.2.840.10008.1.2 | SCU | None |
| Study Root Query/Retrieve Information Model - MOVE | 1.2.840.10008.5.1.4. 1.2.2.2 | Implicit VR Little Endian | 1.2.840.10008.1.2 | SCU | None |
| Image Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Image Storage | | | SCU | None |
| Video Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Video Storage | | | SCU | None |
| SR Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for SR Storage | | | SCU | None |
| Other Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Other Storage | | | SCU | None |

Proposed Presentation Contexts of Ensight Query/Retrieve AE

| Transfer Syntax Name | UID |
|--|------------------------|
| Implicit VR Little Endian | 1.2.840.10008.1.2 |
| Explicit VR Little Endian | 1.2.840.10008.1.2.1 |
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| JPEG Extended (Process 2 & 4) | 1.2.840.10008.1.2.4.51 |
| JPEG Lossless, Non-Hierarchical (Process 14) | 1.2.840.10008.1.2.4.54 |

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| JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1]) | 1.2.840.10008.1.2.4.70 |
| JPEG-LS Lossless | 1.2.840.10008.1.2.4.80 |
| JPEG-LS Lossy (Near-Lossless) | 1.2.840.10008.1.2.4.81 |
| JPEG 2000 (Lossless Only) | 1.2.840.10008.1.2.4.90 |
| JPEG 2000 | 1.2.840.10008.1.2.4.91 |
| RLE Lossless | 1.2.840.10008.1.2.5 |

Transfer Syntaxes for Image Storage

| Transfer Syntax Name | UID |
|---|-------------------------|
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| MPEG2 Main Profile @ Main Level | 1.2.840.10008.1.2.4.100 |
| MPEG2 Main Profile @ High Level | 1.2.840.10008.1.2.4.101 |
| MPEG-4 AVC/H.264 High Profile / Level 4.1 | 1.2.840.10008.1.2.4.102 |
| MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1 | 1.2.840.10008.1.2.4.103 |
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 2D Video | 1.2.840.10008.1.2.4.104 |
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 3D Video | 1.2.840.10008.1.2.4.105 |
| MPEG-4 AVC/H.264 Stereo High Profile / Level 4.2 | 1.2.840.10008.1.2.4.106 |

Transfer Syntaxes for Video Storage

| Transfer Syntax Name | UID |
|--------------------------|---------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |

| | |
|-----------------------------------|------------------------|
| Deflated Explicit VR LittleEndian | 1.2.840.10008.1.2.1.99 |
|-----------------------------------|------------------------|

Transfer Syntaxes for SR Storage

| Transfer Syntax Name | UID |
|--------------------------|---------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |

| Service Status | Further Meaning | Error Code | Details |
|----------------|-----------------------------------|-------------|---|
| Success | Success | 0000 | The SCP has successfully stored the exported SOP Instance. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Success indication message is output to the Service Logs. No message is posted to the User Interface. |
| Refused | Out of Resources | A700 - A7FF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |
| Error | Data Set does not match SOP Class | A900 - A9FF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |

| | | | |
|---------|-----------------------------------|-------------|--|
| Error | Cannot Understand | C000 - CFFF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Coercion of Data Elements | B000 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Data Set does not match SOP Class | B007 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Elements Discarded | B006 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Attribute List Error | 0107 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |

| | | | |
|---------|------------------------------|------------------------|--|
| Warning | Attribute Value Out of Range | 0116 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| | | Any other status code. | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |

2.2.2.4 Association Acceptance Policy

2.2.2.4.1 Proposed Presentation Contexts

The Query/Retrieve Application Entity will propose Presentation Contexts for Verification, Study Root Query/Retrieve Information Model - FIND, Study Root Query/Retrieve Information Model - MOVE and of supported Storage SOP Classes.

| Presentation Context Table | | | | | |
|--|---------------------------------|--------------------------|-------------------|------|---------------|
| Abstract Syntax | | Transfer Syntax | | Role | Extended Neg. |
| Name | UID | Name | UID | | |
| Verification | 1.2.840.10008.1.1 | Implicit VR LittleEndian | 1.2.840.10008.1.2 | SCU | None |
| Study Root Query/Retrieve Information Model - FIND | 1.2.840.10008.5.1.4. 1.2.2.1 | Implicit VR LittleEndian | 1.2.840.10008.1.2 | SCU | None |
| Study Root Query/Retrieve Information Model - MOVE | 1.2.840.10008.5.1.4. 1.2.2.2 | Implicit VR LittleEndian | 1.2.840.10008.1.2 | SCU | None |

| | | | |
|--|--|-----|------|
| Image Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Image Storage | SCU | None |
| Video Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Video Storage | SCU | None |
| SR Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for SR Storage | SCU | None |
| Other Storage SOP Classes listed in "Query/Retrieve AE Spec" | see: Transfer Syntaxes for Other Storage | SCU | None |

Proposed Presentation Contexts of Ensight Query/Retrieve AE

| Transfer Syntax Name | UID |
|--|------------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| JPEG Extended (Process 2 & 4) | 1.2.840.10008.1.2.4.51 |
| JPEG Lossless, Non-Hierarchical (Process 14) | 1.2.840.10008.1.2.4.54 |
| JPEG Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1]) | 1.2.840.10008.1.2.4.70 |
| JPEG-LS Lossless | 1.2.840.10008.1.2.4.80 |
| JPEG-LS Lossy (Near-Lossless) | 1.2.840.10008.1.2.4.81 |
| JPEG 2000 (Lossless Only) | 1.2.840.10008.1.2.4.90 |
| JPEG 2000 | 1.2.840.10008.1.2.4.91 |
| RLE Lossless | 1.2.840.10008.1.2.5 |

Transfer Syntaxes for Image Storage

| Transfer Syntax Name | UID |
|---|-------------------------|
| JPEG Baseline (Process 1) | 1.2.840.10008.1.2.4.50 |
| MPEG2 Main Profile @ Main Level | 1.2.840.10008.1.2.4.100 |
| MPEG2 Main Profile @ High Level | 1.2.840.10008.1.2.4.101 |
| MPEG-4 AVC/H.264 High Profile / Level 4.1 | 1.2.840.10008.1.2.4.102 |
| MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1 | 1.2.840.10008.1.2.4.103 |
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 2D Video | 1.2.840.10008.1.2.4.104 |
| MPEG-4 AVC/H.264 High Profile / Level 4.2 For 3D Video | 1.2.840.10008.1.2.4.105 |
| MPEG-4 AVC/H.264 Stereo High Profile / Level 4.2 | 1.2.840.10008.1.2.4.106 |

Transfer Syntaxes for Video Storage

| Transfer Syntax Name | UID |
|-----------------------------------|------------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |
| Deflated Explicit VR LittleEndian | 1.2.840.10008.1.2.1.99 |

Transfer Syntaxes for SR Storage

| Transfer Syntax Name | UID |
|--------------------------|---------------------|
| Implicit VR LittleEndian | 1.2.840.10008.1.2 |
| Explicit VR LittleEndian | 1.2.840.10008.1.2.1 |

| Service Status | Further Meaning | Error Code | Details |
|----------------|-----------------|------------|---|
| Success | Success | 0000 | The SCP has successfully stored the exported SOP Instance. A message is sent to the QUERY-RETRIEVE- |

| | | | |
|---------|-----------------------------------|-------------|--|
| | | | SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Success indication message is output to the Service Logs. No message is posted to the User Interface. |
| Refused | Out of Resources | A700 - A7FF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |
| Error | Data Set does not match SOP Class | A900 - A9FF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |
| Error | Cannot Understand | C000 - CFFF | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Coercion of Data Elements | B000 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Data Set does not match SOP Class | B007 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |

| | | | |
|---------|------------------------------|------------------------|--|
| Warning | Elements Discarded | B006 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Attribute List Error | 0107 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| Warning | Attribute Value Out of Range | 0116 | Image transmission is considered successful. A message is sent to the QUERY-RETRIEVE-SCP AE indicating successful export. The QUERY-RETRIEVE-SCP AE will send the appropriate PENDING or SUCCESS Status in the C-MOVE Response. Warning indication message is output to the Service Logs. No message is posted to the User Interface. |
| | | Any other status code. | This is treated as a permanent Failure. A message is sent to the QUERY-RETRIEVE-SCP AE indicating an export failure and the Association is released. The QUERY-RETRIEVE-SCP AE will send an appropriate Status in the C-MOVE Response. Error indication message is output to the Service Logs. No message is posted to the User Interface. |

2.3 Network Interfaces

2.3.1 Physical Network Interface

Ensight is indifferent to the physical medium over which TCP/IP executes, which is dependent on the underlying operating system and hardware.

2.4 Configuration

2.4.1 AE Title/Presentation Address Mapping

2.4.1.1 Local AE Titles

The mapping from AE Title to TCP/IP address is configurable via a web interface or via an LDAP client.

Dedicated Local AE Titles for standardization and de-identification are configurable via a web interface or via an LDAP client.

3 Media Interchange

Ensight does not support Media Storage

4 Support of Character Sets

Ensight supports the following extended character sets defined in DICOM 2017 standard.

| Character Set Description | DICOM attribute: Specific Character Set (0008,0005) | Storage | Standardization |
|---------------------------|---|---------|-----------------|
| Latin alphabet No. 1 | ISO_IR 100 | Yes | Yes |
| Latin alphabet No. 2 | ISO_IR 101 | Yes | Yes |
| Latin alphabet No. 3 | ISO_IR 109 | Yes | Yes |
| Latin alphabet No. 4 | ISO_IR 110 | Yes | Yes |
| Cyrillic | ISO_IR 144 | Yes | No |
| Arabic | ISO_IR 127 | Yes | No |
| Greek | ISO_IR 126 | Yes | No |
| Hebrew | ISO_IR 138 | Yes | No |
| Latin alphabet No. 5 | ISO_IR 148 | Yes | Yes |
| Japanese | ISO_IR 13 | Yes | No |
| Thai | ISO_IR 166 | Yes | No |
| Default repertoire | ISO 2022 IR 6 | Yes | Yes |
| Latin alphabet No. 1 | ISO 2022 IR 100 | Yes | Yes |
| Latin alphabet No. 2 | ISO 2022 IR 101 | Yes | Yes |
| Latin alphabet No. 3 | ISO 2022 IR 109 | Yes | Yes |
| Latin alphabet No. 4 | ISO 2022 IR 110 | Yes | Yes |

| | | | |
|----------------------|-----------------|-----|-----|
| Cyrillic | ISO 2022 IR 144 | Yes | No |
| Arabic | ISO 2022 IR 127 | Yes | No |
| Greek | ISO 2022 IR 126 | Yes | No |
| Hebrew | ISO 2022 IR 138 | Yes | No |
| Latin alphabet No. 5 | ISO 2022 IR 148 | Yes | Yes |
| Japanese | ISO 2022 IR 13 | Yes | No |
| Thai | ISO 2022 IR 166 | Yes | No |
| Japanese | ISO 2022 IR 87 | Yes | No |
| Japanese | ISO 2022 IR 159 | Yes | No |
| Korean | ISO 2022 IR 149 | Yes | No |
| Simplified Chinese | ISO 2022 IR 58 | Yes | No |
| Unicode in UTF-8 | ISO_IR 192 | Yes | No |
| GB18030 | GB18030 | Yes | No |
| GBK | GBK | Yes | No |

5 Security

5.1 Security Profiles

Ensight supports the following security profiles:

| Security Profiles Implemented | Supported Actors/Options |
|---|---|
| Basic TLS Secure Transport Connection Profile | n/a |
| AES TLS Secure Transport Connection Profile | n/a |
| Basic Network Address Management Profile | <ul style="list-style-type: none"> ● DHCP Client ● DNS Client |
| Basic Time Synchronization Profile | <ul style="list-style-type: none"> ● DHCP Client ● DNS Client |
| Application Configuration Management Profile | <ul style="list-style-type: none"> ● LDAP Client |

| | |
|---|---|
| Audit Trail Message Format Profile | <i>n/a</i> |
| Audit Trail Message Transmission Profile - SYSLOG-TLS | <i>n/a</i> |
| Audit Trail Message Transmission Profile - SYSLOG-UDP | <i>n/a</i> |
| Basic Application Level Confidentiality Profile | <ul style="list-style-type: none"> ● Retain Longitudinal Temporal Information Full Dates Option ● Retain Device Identity Option ● Retain UIDs Option ● Retain Institution Identity Option |

5.2 Association-Level Security

Ensight can be configured to accept Association Requests from a limited list of configured AEs.

5.3 Application-Level Security

Ensight requires user authentication for a user to access the administration console.

6 ANNEXES

6.1 Information Object Definitions (IODs)

This section describes all the SOP Instances natively created by *Ensight*.

In the "Source" column, the following Values can be used:

- FIXED: The Value is pre-defined and cannot be modified.
- GENERATED: The Value is generated by the system.
- CONFIGURATION: The Value is copied from the system configuration.
- MWL: The Value is copied from a Modality Worklist entry.
- QUERY: The Value is determined by performing a query of any of the supported Query/Retrieve Services.
- USER: The Value is entered by the user.
- SCANNED: The Value is read from a barcode scanner or similar device.
- EMPTY: The Attribute is sent with a zero-length Value.
- SRC_INSTANCE: The Value is copied from previously created/received SOP Instances.

The "Presence" columns reflect the usage of the Module, Functional Group Macro, Attributes, or Value in Ensight Implementation and is not necessarily the same as defined in the DICOM Standard. For the "Presence" column the following Values can be used:

- ALWAYS: the module, functional group macro, Attributes or Value is always present.
- CONDITIONAL: the presence of the module, functional group macro, Attributes or Value is dependent on a condition. The condition must be listed in the "Conditions" column.
- SRC_COPY: The presence of the Attributes and Values depends on the availability of these in the source instances, which are used for copying this information.
- EMPTY: The Attribute is present but without a Value (zero length).

6.1.1 ENDEX™ Results - Comprehensive SR IOD

| IE | Module Name | Presence (Module) | Reference |
|-----------|----------------------------|-------------------|--|
| Patient | Patient Module | ALWAYS | Table 6-1 Patient Module Error! Reference source not found. |
| Study | General Study Module | ALWAYS | Table 6-2 General Study Module |
| Series | General Series | ALWAYS | Table 6-3 General Series Module |
| | SR Document Series Module | ALWAYS | Table 6-4 SR Document Series Module |
| Equipment | General Equipment Module | ALWAYS | Table 6-5 General Equipment Module |
| Document | SR Document General Module | ALWAYS | Table 6-6 SR Document General Module |
| | SR Document Content Module | ALWAYS | Table 6-7 SR Document Content Module |
| | SOP Common Module | ALWAYS | Table 6-8 SOP Common Module |
| | General Image Module | ALWAYS | Table 6-9 General Image Module |

6.1.1.1 Common Modules

All SOP Instances generated by the system use the common modules list below, as defined in the IOD specific subsections below.

Table 6-1 Patient Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|----------------|------------|--------------|-----------------------|-------------------|---------------------------------|
| Patient's Name | 0010, 0010 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|----------------|------------|--------------|-----------------------|-------------------|---------------------------------|
| Patient ID | 0010, 0020 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |

Table 6-2 General Study Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|----------------------------|-------------|--------------|-----------------------|-------------------|---------------------------------------|
| Study Instance UID | 0018, 000D | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Study Date | 0008, 0020 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Study Time | 0008, 0030 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Accession Number | (0008,0050) | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Referring Physician's Name | 0008, 0090 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Study Description | 0008, 1030 | GENERATED | ALWAYS | ALWAYS | <i>Standardized study description</i> |
| Study ID | 0020, 0010 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |

Table 6-3 General Series Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|---------------------|------------|-----------|-----------------------|-------------------|------------------------------|
| Series Instance UID | 0020, 000E | GENERATED | ALWAYS | ALWAYS | <i>A generated DICOM UID</i> |
| Series Description | 0008, 1030 | FIXED | ALWAYS | ALWAYS | ENDEX Results |

Table 6-4 SR Document Series Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|----------------|------------|--------|-----------------------|-------------------|-------|
| Modality | 0008, 0060 | FIXED | ALWAYS | ALWAYS | SR |

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|-----------------------|------------|---------------|------------------------------|--------------------------|--------------|
| Series Number | 0020, 0010 | FIXED | ALWAYS | ALWAYS | 99 |

Table 6-5 General Equipment Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|-------------------------|------------|---------------|------------------------------|--------------------------|---|
| Manufacturer | 0008, 0070 | FIXED | ALWAYS | ALWAYS | Enlitic |
| Institution Name | 0008, 0080 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |
| Manufacturer Model Name | 0008, 1090 | FIXED | ALWAYS | ALWAYS | Ensight |
| Device UID | 0018, 1002 | FIXED | ALWAYS | ALWAYS | 1.2.826.0.1.3680043.9.7296.00860002304557 |

Table 6-6 SR Document General Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|-----------------------|------------|---------------|------------------------------|--------------------------|---------------------|
| Completion Flag | 0040, A491 | GENERATED | ALWAYS | ALWAYS | COMPLETE |
| Verification Flag | 0040, A493 | GENERATED | ALWAYS | ALWAYS | UNVERIFIED |
| Content Date | 0008, 0023 | GENERATED | ALWAYS | ALWAYS | <i>Current date</i> |
| Content Time | 0008, 0033 | GENERATED | ALWAYS | ALWAYS | <i>Current time</i> |

Table 6-7 SR Document Content Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|-----------------------|------------|---------------|------------------------------|--------------------------|--------------|
| Value Type | 0040, A040 | GENERATED | ALWAYS | ALWAYS | CONTAINER |
| Continuity of Content | 0040, A050 | GENERATED | ALWAYS | ALWAYS | SEPARATE |

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|---------------------------|------------|-----------|-----------------------|-------------------|--|
| Content Template Sequence | 0040, A504 | GENERATED | ALWAYS | ALWAYS | <i>See ENDEX Results SR for encoding on supported TIDs</i> |

Table 6-8 SOP Common Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|------------------------------|------------|---------------|-----------------------|-------------------|---|
| Specific Character Set | 0008, 0005 | CONFIGURATION | ALWAYS | ALWAYS | <i>A DICOM Specific Character Set, as defined in the standard</i> |
| Instance Creator UID | 0008, 0014 | FIXED | ALWAYS | ALWAYS | 1.2.826.0.1.3680043.9.7296.00860002304557 |
| SOP Class UID | 0008, 0016 | FIXED | ALWAYS | ALWAYS | 1.2.840.10008.5.1.4.1.1.88.33 |
| SOP Instance UID | 0008, 0018 | GENERATED | ALWAYS | ALWAYS | <i>A generated DICOM UID</i> |
| Software Versions | 0018, 1020 | GENERATED | ALWAYS | ALWAYS | <i>Current version of Ensight</i> |
| Original Attributes Sequence | 0400, 0561 | SRC_INSTANCE | SRC_COPY | SRC_COPY | <i>Copied from source value</i> |

Table 6-9 General Image Module

| Attribute Name | Tag | Source | Presence of Attribute | Presence of Value | Value |
|-----------------|------------|--------|-----------------------|-------------------|-------|
| Instance Number | 0020, 0013 | FIXED | ALWAYS | ALWAYS | 99 |

6.2 Structured Report Content Encoding

6.2.1 ENDEX Results SR

6.2.1.1 ENDEX Results SR Template Overview

| TID | Mapping Resource | Description |
|----------------|------------------|---|
| ENDEXRES | 99ENLITIC | Root of Standardized Results |
| ENDEXSTUDYRES | 99ENLITIC | Study-Level Standardized Results |
| CDMOBJRES | 99ENLITIC | Series-Level Standardized Results. Series may be broken out into constituent (sub-series) groups if it consists of disparate elements (for example, if a series contains a SCOUNT and AXIAL volume, Ensight will logically divide the series into two CDM Objects – one tracking the SCOUT the other the AXIAL volume) |
| ENDEXSERIESRES | 99ENLITIC | <u>Summary</u> of Series-Level Standardized Results. |

6.2.1.2 ENDEX Results (TID ENDEXRES)

| NL | Rel with Parent | VT | Concept Name | Source | Presence of Content Item | Values | TID | Comments |
|----|-----------------|-----------|---|-----------|--------------------------|---|----------------|-------------|
| | | CONTAINER | (ENDEXRESULTS, 99ENLITIC, "ENDEX Results") | | | | ENDEXRES | <i>None</i> |
| > | HAS CONCEPT MOD | CODE | (121049, DCM, "Language of Content Item and Descendants") | FIXED | ALWAYS | (en-US, RFC5646, "English (United States") | 1204 | <i>None</i> |
| > | HAS OBS CONTEXT | CODE | (121005, DCM, "Observer Type") | FIXED | ALWAYS | (121007, DCM, "Device") | 1004 | <i>None</i> |
| > | HAS OBS CONTEXT | UIDREF | (121012, DCM, "Device Observer UID") | FIXED | ALWAYS | 1.2.826.0.1.3680043.9.7 296.00860002304557 | 1004 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (121013, DCM, "Device Observer Name") | FIXED | ALWAYS | Ensight | 1004 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (121014, DCM, "Device Observer Manufacturer") | FIXED | ALWAYS | Enlitic | 1004 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (111001, DCM, "Algorithm Name") | FIXED | ALWAYS | "ENDEX | 4019 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (111003, DCM, "Algorithm Version") | GENERATED | ALWAYS | <i>Model Version</i> | 4019 | <i>None</i> |
| > | HAS CONCEPT MOD | CODE | (121058, DCM, "Procedure reported") | FIXED | ALWAYS | (363679005, SCT, "Imaging procedure") | 1500 | <i>None</i> |
| > | CONTAINS | CONTAINER | (ENDEXATTRIBUTE S, 99ENLITIC, "ENDEX Standardized Attributes) | GENERATED | ALWAYS | | | <i>None</i> |
| >> | CONTAINS | CONTAINER | (STUDYGROUP, 99ENLITIC, "ENDEX Study Description Group") | GENERATED | ALWAYS | | ENDEXSTUDYRES | <i>None</i> |
| >> | CONTAINS | CONTAINER | (SERIESGROUP, 99ENLITIC, "ENDEX Series Description Group") | GENERATED | ALWAYS | | ENDEXSERIESRES | <i>None</i> |

| | | | | | | | | |
|----|----------|-----------|--|-----------|--------|--|-----------|-------------|
| >> | CONTAINS | CONTAINER | (CDMOBJGROUP, 99ENLITC, "ENDEX CDM Object (Sub- Series) Group") | GENERATED | ALWAYS | | CDMOBJRES | <i>None</i> |
|----|----------|-----------|--|-----------|--------|--|-----------|-------------|

6.2.1.3 Standardized Study Results (TID ENDEXSTUDYRES)

| NL | Rel with Parent | VT | Concept Name | Source | Presence of Content Item | VM | Comments |
|----|-----------------|-----------|---|--------------|--------------------------|-----|--|
| | CONTAINS | CONTAINER | (STUDYGROUP, 99ENLITIC, "ENDEX Study Description Group") | | | | <i>None</i> |
| > | HAS OBS CONTEXT | UIDREF | (110180, DCM, "Study Instance UID") | SRC_INSTANCE | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (STUDYANATOMY, 99ENLITIC, "Study Anatomy") | GENERATED | CONDITIONAL | 1-n | Present when Study Anatomy is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYVIEW, 99ENLITIC, "Study View") | GENERATED | CONDITIONAL | 1-n | Present when Study View is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYMODALITY, 99ENLITIC, "Study Modality") | GENERATED | CONDITIONAL | 1 | Present when Primary Study Modality is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYMODALITY, 99ENLITIC, "Study Modalities") | GENERATED | CONDITIONAL | 1 | Present when List of modalities is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYCONTRAST, 99ENLITIC, "Study Contrast") | GENERATED | CONDITIONAL | 1 | Present when Study contrast is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYCONTRAST_D, 99ENLITIC, "Study Contrast Descriptor") | GENERATED | CONDITIONAL | 1 | Present when Study contrast descriptor is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (STUDYLATERALITY, 99ENLITIC, "Study Laterality") | GENERATED | CONDITIONAL | 1 | Present when Study contrast descriptor is inferred by the model. |
| > | HAS OBS CONTEXT | TEXT | (CDMSTUDYTYPE, 99ENLITIC, "Cdm Study Type") | GENERATED | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (STUDYDESC, 99ENLITIC, "ENDEX Study Description") | GENERATED | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (ORIGSTUDYDESC, 99ENLITIC, "Original Study Description") | SRC_INSTANCE | ALWAYS | 1 | <i>None</i> |

6.2.1.4 Standardized Series (TID CDMOBJRES)

| NL | Rel with Parent | VT | Concept Name | Source | Presence of Content Item | VM | Comments |
|----|-----------------|-----------|---|--------------|--------------------------|-----|--|
| | CONTAINS | CONTAINER | (CDMOBJRES, 99ENLITIC, "ENDEX CDM Object (Sub-Series) Group") | | | | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJID, 99ENLITIC, "Cdm Object ID") | GENERATED | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | UIDREF | (REFINSTANCEUID, 99ENLITIC, "Referenced SOP Instance UID") | SRC_INSTANCE | ALWAYS | 1-n | List of SOP Instance UIDs to which this sub-series Object applies to. |
| > | HAS OBS CONTEXT | UIDREF | (REFSERIESUID, 99ENLITIC, "Referenced Series Instance UID") | SRC_INSTANCE | ALWAYS | 1 | Reference to Series Instance UID of a series to which this sub-series object belongs to. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJTYPE, 99ENLITIC, "Cdm Object Type") | GENERATED | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJMODALITY, 99ENLITIC, "Cdm Modality") | GENERATED | CONDITIONAL | 1 | Present if model infers the modality for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJANATOMY, 99ENLITIC, "Cdm Anatomy") | GENERATED | CONDITIONAL | 1 | Present if model infers the anatomy for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJLATERALITY, 99ENLITIC, "Cdm Laterality") | GENERATED | CONDITIONAL | 1 | Present if model infers the laterality for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJCONTRAST, 99ENLITIC, "Cdm Contrast") | GENERATED | CONDITIONAL | 1 | Present if model infers contrast for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMSTUDYTYPE, 99ENLITIC, "Cdm Study Type") | GENERATED | CONDITIONAL | 1 | Present if model infers contrast for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJVIEW, 99ENLITIC, "Cdm View") | GENERATED | CONDITIONAL | 1 | Present if model infers contrast for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJSLICETHICK, 99ENLITIC, "Cdm Slice Thickness") | GENERATED | CONDITIONAL | 1 | Present if model infers slice thickness for this sub-series object. Applicable to CT and MR only. |

| | | | | | | | |
|---|-----------------|------|---|-----------|-------------|---|--|
| > | HAS OBS CONTEXT | TEXT | (CDMOBJKERNEL, 99ENLITIC, "Cdm Kernel") | GENERATED | CONDITIONAL | 1 | Present if model infers kernel for this sub-series object. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJIMGWEIG HT, 99ENLITIC, "Cdm Image Weighting") | GENERATED | CONDITIONAL | 1 | Present if model infers image weighting for this sub-series object. Applies to MR only. |
| > | HAS OBS CONTEXT | TEXT | (CDMOBJIMGWEIG HTQ, 99ENLITIC, "Cdm Image Weighting Qualifier") | GENERATED | CONDITIONAL | 1 | Present if model infers image weighting and image weighting qualifier for this sub-series object. Applies to MR only. |
| > | HAS OBS CONTEXT | TEXT | (SERIESDESC, 99ENLITIC, "ENDEX Series Description") | GENERATED | ALWAYS | 1 | <i>None</i> |

6.2.1.5 Summary of Standardized Series (TID ENDEXSERIESRES)



TID ENDEXSERIESRES is a summary object containing an aggregation of results from TID CDMOJSRES.

Series-level results are defined in TID CDMOBJRES.

| NL | Rel with Parent | VT | Concept Name | Source | Presence of Content Item | VM | Comments |
|----|-----------------|-----------|--|--------------|--------------------------|-----|---|
| | CONTAINS | CONTAINER | (SERIESGROUP, 99ENLITIC, "ENDEX Study Description Group") | | | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | UIDREF | (112002, DCM, "Series Instance UID") | SRC_INSTANCE | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (SERIESDESC, 99ENLITIC, "ENDEX Series Description") | GENERATED | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (ORIGSERIESDESC, 99ENLITIC, "Original Series Description") | SRC_INSTANCE | ALWAYS | 1 | <i>None</i> |
| > | HAS OBS CONTEXT | TEXT | (SERIESIMGWEIGHT, 99ENLITIC, "Series Image Weighting") | GENERATED | CONDITIONAL | 1-n | Present when CDMOBJRES entries contain image weighting entries (MR only). |
| > | HAS OBS CONTEXT | TEXT | (SERIESMODALITY, 99ENLITIC, "Series Modalities") | GENERATED | CONDITIONAL | 1-n | Present when CDMOBJRES entries contain modality entry. |
| > | HAS OBS CONTEXT | TEXT | (SERIESCONTRAST, 99ENLITIC, "Study Contrast") | GENERATED | CONDITIONAL | 1-n | Present when CDMOBJRES entries contain contrast entries. |
| > | HAS OBS CONTEXT | TEXT | (SERIESIMAGEPLANE, 99ENLITIC, "Series Image Plane") | GENERATED | CONDITIONAL | 1-n | Present when CDMOBJRES entries contain image plane entries (MR, CT only). |
| > | HAS OBS CONTEXT | TEXT | (SERIESANATOMY, 99ENLITIC, "Series Anatomy") | GENERATED | CONDITIONAL | 1-n | Present when CDMOBJRES entries contain anatomy entries. |
| > | HAS OBS CONTEXT | TEXT | (SERIESVIEW, 99ENLITIC, "Study View") | GENERATED | CONDITIONAL | 1 | Present when CDMOBJRES entries contain view entries. |

| | | | | | | | |
|---|-----------------|------|--|-----------|--------|-----|--|
| > | HAS OBS CONTEXT | TEXT | (REFCDMOBJID, 99ENLITC, "Referenced Cdm Object ID") | GENERATED | ALWAYS | 1-n | List of underlying sub-series groups (Cdm Object Entries from CDMOBJRES). |
| > | HAS OBS CONTEXT | TEXT | (OTHERSERIESDESC, 99ENLITC, "Other Standardized Series Description ") | GENERATED | ALWAYS | 1-n | List of all standardized series description from the references Cdj Objects from CDMOBJRES. |

6.3 Standardized Attributes

| Attribute Name | Tag | VR |
|--------------------|------------|----|
| Study Description | 0008, 1030 | LO |
| Series Description | 0008, 103E | LO |

Standardize-supported DICOM attributes.