

**DICOM  
CONFORMANCE  
STATEMENT  
FOR ZIOSTATION 1.2**

<b>0</b>	<b>DICOM CONFORMANCE STATEMENT OVERVIEW</b>	<b>4</b>
<b>1</b>	<b>IMPLEMENTATION MODEL</b>	<b>5</b>
1.1	APPLICATION DATA FLOW .....	5
1.2	FUNCTIONAL DEFINITION OF AE'S .....	6
1.3	SEQUENCING OF REAL-WORLD ACTIVITIES.....	7
<b>2</b>	<b>AE SPECIFICATIONS</b>	<b>7</b>
2.1	NETWORK SPECIFICATION .....	7
2.1.1	<i>Association Policies</i> .....	7
2.1.1.1	General.....	7
2.1.1.2	Number of Associations.....	8
2.1.1.3	Asynchronous Nature.....	8
2.1.1.4	Implementation Identifying Information .....	8
2.1.2	<i>Association Initiation Policy</i> .....	8
2.1.2.1	Activities A, B, C, D.....	8
2.1.2.1.1	Description and Sequencing of Activities.....	8
2.1.2.1.2	Proposed Presentation Contexts.....	9
2.1.2.1.3	SOP Specific Conformance.....	14
2.1.2.1.3.1	SOP Specific Conformance for Verify SOP Class.....	14
2.1.2.1.3.2	SOP Specific Conformance for Storage SOP Class .....	14
2.1.2.1.3.3	SOP Specific Conformance for Query/Retrieve Information Model - FIND .....	15
2.1.2.1.3.4	SOP Specific Conformance for Query/Retrieve Information Model - MOVE.....	15
2.1.2.1.3.5	SOP Specific Conformance for Print Management Service Class.....	15
2.1.2.1.3.5.1	Basic Film Session SOP Class .....	16
2.1.2.1.3.5.2	Basic Film Box SOP Class.....	16
2.1.2.1.3.5.3	Basic Grayscale Image Box SOP Class .....	17
2.1.2.1.3.5.4	Basic Color Image Box SOP Class.....	18
2.1.2.1.3.5.5	Printer SOP Class.....	18
2.1.3	<i>Association Acceptance Policy</i> .....	18
2.1.3.1	Real-World Activities.....	19
2.1.3.1.1	Description and Sequencing of Real-World Activities.....	19
2.1.3.1.2	Proposed Presentation Contexts.....	19
2.1.3.1.3	SOP Specific Conformance .....	24
2.1.3.1.3.1	SOP Specific Conformance for Verification SOP Class.....	24
2.1.3.1.3.2	SOP Specific Conformance for Storage SOP Class .....	24
2.1.3.1.4	Accepted Presentation Contexts.....	24
2.1.3.1.5	Transfer Syntax Selection Policy .....	25
2.2	NETWORK PROFILE .....	25
2.2.1	<i>Supported Protocol Stacks(PS 3.8, PS 3.9)</i> .....	25
2.2.2	<i>OSI Stack</i> .....	25
2.2.3	<i>TCP/IP Stack</i> .....	25
2.2.4	<i>API</i> .....	25
2.2.5	<i>Physical Device Support</i> .....	25
2.2.6	<i>Point-to-point stack</i> .....	25
2.3	STANDARD EXTENDED/SPECIALIZED/PRIVATE SOP CLASSES .....	25
2.3.1	<i>Extended CT, MR, Nuclear Medicine, Positron Emission Tomography, XRay Angiographic objects</i> 25	25
2.3.2	<i>Extended Secondary Capture object</i> .....	25
2.3.3	<i>Extended Comprehensive SR object</i> .....	26
2.3.4	<i>Private SOP Classes</i> .....	26
2.4	CONFIGURATION.....	26
2.4.1	<i>AE Title/Presentation Address Mapping</i> .....	26
2.4.2	<i>Parameters</i> .....	26
<b>3</b>	<b>MEDIA INTERCHANGE</b>	<b>27</b>
3.1	IMPLEMENTATION MODEL .....	27
3.1.1	<i>Application Data Flow</i> .....	27
3.2	AE SPECIFICATIONS .....	27
3.2.1	<i>Application Entity Specification</i> .....	27
3.2.1.1	Real-World Activities .....	27
3.2.1.1.1	Activity - Export to CD-R .....	27
3.2.1.1.1.1	Media Storage Application Profiles.....	27

3.2.1.1.2	Activity - Read data from CD-R .....	27
3.2.1.1.2.1	Media Storage Application Profiles .....	27
<b>4</b>	<b>SUPPORT OF CHARACTER SETS</b>	<b>28</b>

## 0 DICOM CONFORMANCE STATEMENT OVERVIEW

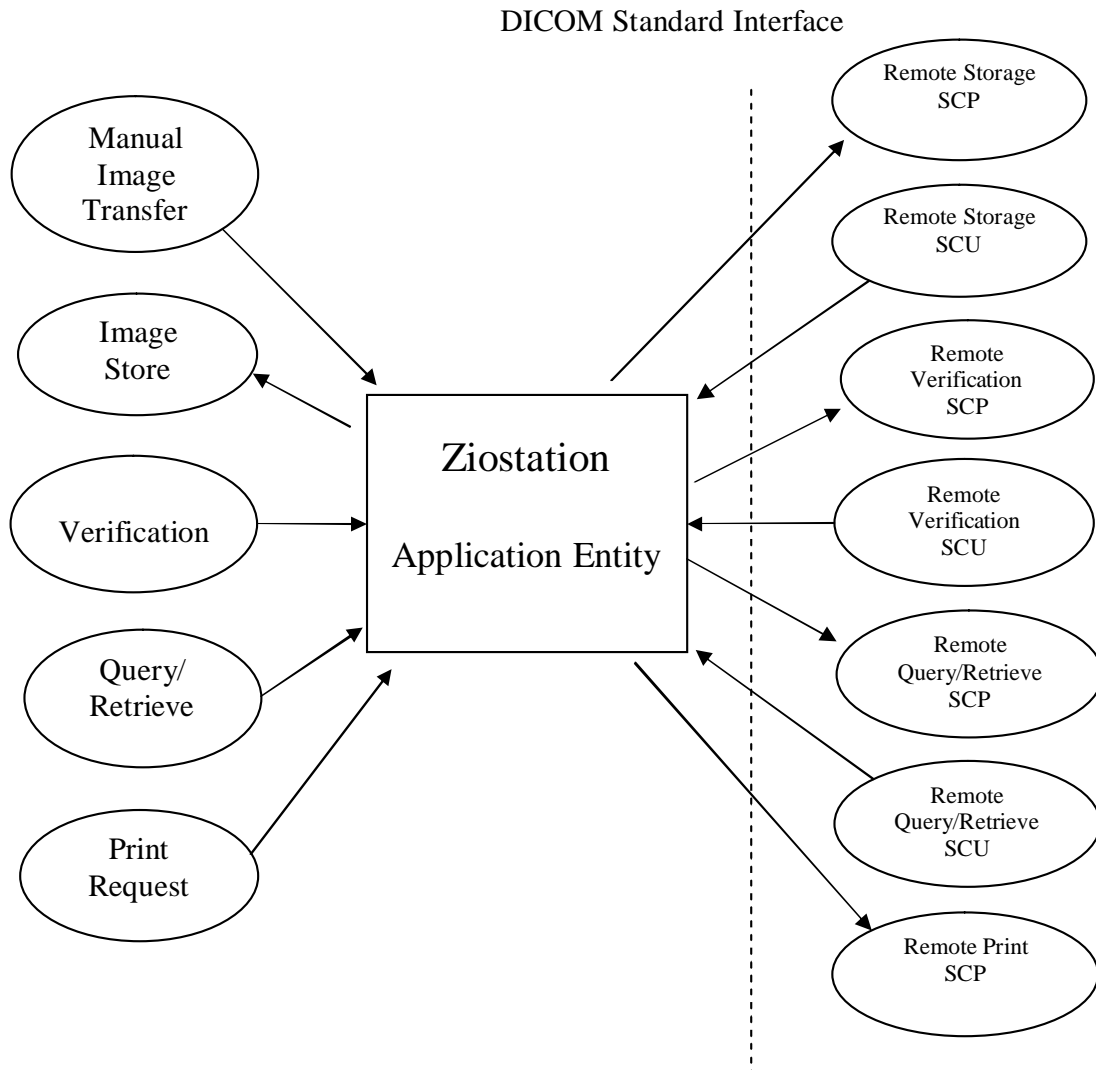
This document is the DICOM Conformance Statement for ZIOSTATION 1.2.

ZIOSTATION 1.2 supports the following DICOM services:

- Verification Service Class User (SCU)
- Verification Service Class Provider (SCP)
- Storage Service Class User (SCU)
- Storage Service Class Provider (SCP)
- Query/Retrieve Service Class User (SCU)
- Print Management Service Class User (SCU)
- Write files on General Purpose CD-R(FSC)
- Read files from General Purpose CD-R(FSR)

# 1 IMPLEMENTATION MODEL

## 1.1 Application Data Flow



**Figure 1 : Application Data Flow Diagram**

ZIOSTATION 1.2 implementation model is shown in Figure 1.

All DICOM services are provided through ZIOSTATION 1.2, which is launched by an operator.

The remote DICOM Application Entities (AE), which are associated with ZIOSTATION 1.2, should have been configured by the support engineers beforehand.

Association of image store service to remote AE is activated when an operator manually calls for transfer. An operator indicates the transfer DICOM image data to remote AE after he selects the one of patients, studies, series or images on ZIOSTATION 1.2.

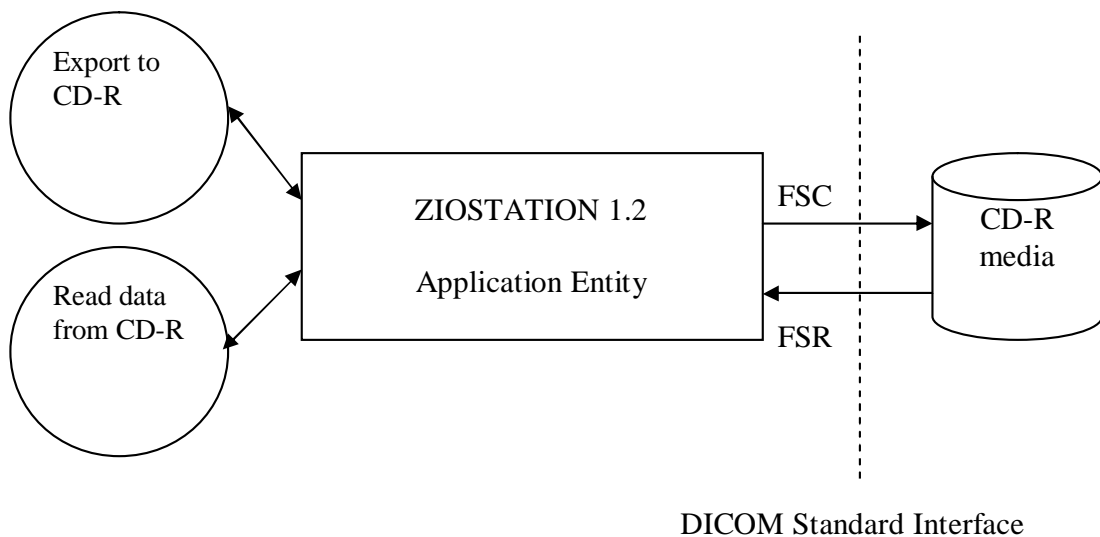
ZIOSTATION 1.2 send request for the Verification service to the remote AE.

ZIOSTATION 1.2 responds to the Verification service from remote AE.

The association for storage service is invoked from remote AE. And its association is received and accepted by ZIOSTATION 1.2, remote AE begins to transfer the DICOM image data.

ZIOSTATION 1.2 starts up the association for Query/Retrieve and Print service requests to remote AE.

ZIOSTATION 1.2 also supports reading data from General Purpose CD-R media and export data to (Figure 2).



**Figure 2 : Application Data Flow Diagram for DICOM CD-R**

## 1.2 Functional Definition of AE's

ZIOSTATION 1.2 supports the following functions:

- Receive and accept associations from remote AE
- Initiate associations
- Send DICOM image data (SCU)
- Receive DICOM image data (SCP)
- Send request for Verification service to remote AE (SCU)
- Respond to Verification service from remote AE (SCP)
- Send request for Query service to remote AE (SCU)
- Send request for Retrieve service to remote AE (SCU)
- Send request for Print service to remote AE (SCU)
- Export data to General Purpose CD-R (FSC)
- Read files from General Purpose CD-R (FSR)

### 1.3 Sequencing of Real-World Activities

Sequencing of Real-World Activities is not applied.

## 2 AE SPECIFICATIONS

The Network capabilities of ZIOSTATION 1.2 are specified in section 2.1, and Media capabilities are specified in section 3.

### 2.1 Network Specification

ZIOSTATION 1.2 provides Standard Conformance to the following SOP Classes.

**Table 1: SOP Classes for ZIOSTATION 1.2**

SOP Class Name	SOP Class UID	SCU	SCP
Verification SOP Class	1.2.840.10008.1.1	Yes	Yes
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Yes	Yes
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	Yes	Yes
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	Yes	Yes
Digital Mammography X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Yes	Yes
Digital Mammography X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Yes	Yes
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Yes	Yes
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	Yes	Yes
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Yes	Yes
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Yes	Yes
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Yes	Yes
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Yes	Yes
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Yes	Yes
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Yes	Yes
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Yes	Yes
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Yes	Yes
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Yes	Yes
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Yes	Yes
Study Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.2.1	Yes	No
Study Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.2.2	Yes	No
Basic Grayscale Print Management Meta SOP Class	1.2.840.10008.5.1.1.9	Yes	No
Basic Color Print Management Meta SOP Class	1.2.840.10008.5.1.1.18	Yes	No

#### 2.1.1 Association Policies

##### 2.1.1.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed.

**Table 2: DICOM Application Context**

DICOM Application Context Name	1.2.840.10008.3.1.1.1
--------------------------------	-----------------------

Max PDU size is 65536 (64K) as default.

### 2.1.1.2 Number of Associations

ZIOSTATION 1.2 accepts Associations for the Storage SOP Class.

**Table 3: Number of Associations Accepted for AE Storage**

Maximum number of simultaneous Associations	16
---	----

### 2.1.1.3 Asynchronous Nature

ZIOSTATION 1.2 does not support asynchronous operations (or sub-operations) window negotiation.

### 2.1.1.4 Implementation Identifying Information

The implementation information for this Application Entity is.

**Table 4: DICOM Implementation Class and Version for AE Storage**

Implementation Class UID	1.2.392.200080.100.200
Implementation Version Name	ZIO_DCM_SVR_200

## 2.1.2 Association Initiation Policy

ZIOSTATION 1.2 initiates the association between the remote AE at:

- A Verification
- B Manual Transfer
- C Query/Retrieve
- D Print

by operator's interaction.

### 2.1.2.1 Activities A, B, C, D

Each of the above activities (A, B, C, D) initiates the DICOM association.

#### 2.1.2.1.1 Description and Sequencing of Activities

At Verification, ZIOSTATION 1.2 sends C-ECHO request to remote AE and displays results.

At Manual Transfer, it sends DICOM image data to remote AE.

At Query/Retrieve, it queries about remote AE DICOM image data information, and it receives necessary data.

At Print, it sends the DICOM image data after film's width/height format has been specified. Print requests are queued and processed background.



### 2.1.2.1.2 Proposed Presentation Contexts

ZIOSTATION 1.2 is capable of proposing the Presentation Contexts shown in the following table.

**Table 5: Proposed Presentation Contexts**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Verification SOP Class	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Digital Mammography X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Digital Mammography X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCU	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCU	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCU	None
		RLE Lossless	1.2.840.10008.1.2.5	SCU	None
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	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
Basic Grayscale Print Management Meta SOP Class	1.2.840.10008.5.1.1.9	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
Basic Color Print Management Meta SOP Class	1.2.840.10008.5.1.1.18	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None

### 2.1.2.1.3 SOP Specific Conformance

#### 2.1.2.1.3.1 SOP Specific Conformance for Verify SOP Class

ZIOSTATION 1.2 provides standard conformance as SCU of Verify SOP Class.

#### 2.1.2.1.3.2 SOP Specific Conformance for Storage SOP Class

ZIOSTATION 1.2 can execute multiple C-STORE as storage service user with a single association. If C-STORE is successful, ZIOSTATION 1.2 transfers selected DICOM image data as interaction to remote AE. If association or transfer fails, ZIOSTATION 1.2 displays error messages. If a response status for G-STORE is warning, then ZIOSTATION 1.2 terminates the following processes. No extended negotiation is performed.

### 2.1.2.1.3.3 SOP Specific Conformance for Query/Retrieve Information Model - FIND

ZIOSTATION 1.2 does not support relational queries. No extended negotiation is performed. The following table shows available keys for queries.

**Table 6: Study Level Request Attributes for Study Root Query/Retrieve Information Model**

Attribute Name	Tag	Type
Study Date	(0008,0020)	R
Study Time	(0008,0030)	R
Accession Number	(0008,0050)	R
Patient's Name	(0010,0010)	R
Patient ID	(0010,0020)	R
Study ID	(0020,0010)	R
Study Instance UID	(0020,000d)	U
Number of Study Related Series	(0020,1206)	O
Number of Study Related Instances	(0020,1208)	O
Modalities in Study	(0008,0061)	O

**Table 7: Series Level Request Attributes for Study Root Query/Retrieve Information Model**

Attribute Name	Tag	Type
Modality	(0008,0060)	R
Series Number	(0020,0011)	R
Series Instance UID	(0020,000e)	U
Study Instance UID	(0020,000d)	O
Number of Series Related Instances	(0020,1209)	O

**Table 8: Image Level Request Attributes for Study Root Query/Retrieve Information Model**

Attribute Name	Tag	Type
Instance Number	(0020,0013)	R
SOP Instance UID	(0008,0018)	U
Series Instance UID	(0020,000e)	O
Series Number	(0020,0011)	O

### 2.1.2.1.3.4 SOP Specific Conformance for Query/Retrieve Information Model - MOVE

ZIOSTATION 1.2 does not support relational retrievals. No extended negotiation is performed.

### 2.1.2.1.3.5 SOP Specific Conformance for Print Management Service Class

Switching between Color and Grayscale is manual. If the association or data transfer fails, then error messages are displayed. No extended negotiation is performed.

ZIOSTATION 1.2 supports the following SOP classes as defined by the Print management Service Class.

**Table 9: SOP Classes for Print Management Service Class**

SOP Class Name	SOP Class UID
Basic Film Session SOP Class	1.2.840.10008.5.1.1.1
Basic Film Box SOP Class	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box SOP Class	1.2.840.10008.5.1.1.4
Basic Color Image Box SOP Class	1.2.840.10008.5.1.1.4.1
Printer SOP Class	1.2.840.10008.5.1.1.16

**2.1.2.1.3.5.1 Basic Film Session SOP Class**

The ZIOSTATION 1.2 provides the following support for the Basic Film Session attributes sent by the N-CREATE DIMSE service's SCU.

**Table 10: Basic Film Session SOP Class Request Attributes**

Attribute	Tag	Valid Range
Number of Copies	(2000,0010)	1 - 1000
Print Priority	(2000,0020)	MED
Medium Type	(2000,0030)	CLEAR FILM BLUE FILM PAPER
Film Destination	(2000,0040)	MAGAZINE PROCESSOR BIN_1 BIN_2 BIN_3 BIN_4 BIN_5 BIN_6 BIN_7 BIN_8 BIN_9 BIN_10

It is expected that the other attributes are not set and use printer's default values.

**2.1.2.1.3.5.2 Basic Film Box SOP Class**

The ZIOSTATION 1.2 provides the following support for the Basic Film Box attributes sent by the N-CREATE, N-ACTION and N-DELETE service's SCU.



**Table 11: Basic Film Box SOP Class Request Attributes**

Attribute	Tag	Valid Range
Image Display Format	(2010,0010)	STANDARD\1,1 STANDARD\1,2 STANDARD\2,2 STANDARD\2,3 STANDARD\3,3 STANDARD\3,4 STANDARD\3,5 STANDARD\4,4 STANDARD\4,5 STANDARD\4,6 STANDARD\5,5
Film Orientation	(2010,0040)	PORTRAIT LANDSCAPE
Min Density	(2010,0120)	
Max Density	(2010,0130)	
Configuration Information	(2010,0150)	

It is expected that the other attributes are not set and use printer's default values.

#### 2.1.2.1.3.5.3 Basic Grayscale Image Box SOP Class

The ZIOSTATION 1.2 provides the following support for the Basic Grayscale Image Box attributes sent by the N-SET service's SCU.

**Table 12: Basic Grayscale Image Box SOP Class Request Attributes**

Attribute	Tag	Valid Range
Image Box Position	(2020,0010)	1 - 25
Basic Grayscale Image Sequence	(2020,0110)	
> Samples per Pixel	(0028,0002)	1
> Photometric Interpretation	(0028,0004)	MONOCHROME1 MONOCHROME2
> Rows	(0028,0010)	
> Columns	(0028,0011)	
> Pixel Aspect Ratio	(0028,0034)	1 : 1
> Bits Allocated	(0028,0100)	8 or 16
> Bits Stored	(0028,0101)	8 - 16
> High Bit	(0028,0102)	7 - 15
> Pixel Representation	(0028,0103)	0
> Pixel Data	(7FE0,0010)	
Min Density	(2010,0120)	
Max Density	(2010,0130)	
Configuration Information	(2010,0150)	
Requested Image Size	(2020,0030)	

It is expected that the other attributes are not set and use printer's default values.

#### 2.1.2.1.3.5.4 Basic Color Image Box SOP Class

The ZIOSTATION 1.2 provides the following support for the Basic Color Image Box attributes sent by the N-SET service's SCU.

**Table 13: Basic Color Image Box SOP Class Request Attributes**

Attribute	Tag	Valid Range
Basic Color Image Sequence	(2020,0111)	
> Image Box Position	(2020,0010)	1 - 25
> Samples per Pixel	(0028,0002)	3
> Photometric Interpretation	(0028,0004)	RGB
> Rows	(0028,0010)	
> Columns	(0028,0011)	
> Pixel Aspect Ratio	(0028,0034)	1 : 1
> Bits Allocated	(0028,0100)	8
> Bits Stored	(0028,0101)	8
> High Bit	(0028,0102)	7
> Pixel Representation	(0028,0103)	0
> Pixel Data	(7FE0,0010)	

#### 2.1.2.1.3.5.5 Printer SOP Class

The ZIOSTATION 1.2 provides the following support for the Printer attributes sent by the N-GET service's SCU.

**Table 14: Printer SOP Class Request Attributes**

Attribute	Tag	Valid Range
Printer Status	(2110,0010)	
Printer Status Info	(2110,0020)	
Printer Name	(2110,0030)	
Manufacturer	(0008,0070)	
Manufacturer's Model Name	(0008,1090)	
Device Serial Number	(0018,1000)	
Software Version(s)	(0018,1020)	
Date of Last Calibration	(0018,1200)	
Time of Last Calibration	(0018,1201)	

#### 2.1.3 Association Acceptance Policy

ZIOSTATION 1.2 accepts the remote AE's associations when all the following condition are met:

- AE which has established associations is registered in ZIOSTATION 1.2
- Associations for verification service or storage service
- ZIOSTATION 1.2 is in the association acceptable state

### 2.1.3.1 Real-World Activities

#### 2.1.3.1.1 Description and Sequencing of Real-World Activities

The ZIOSTATION 1.2 awaits the associations for Storage and Verification services. If the association proposed from registered AE, it is accepted.

#### 2.1.3.1.2 Proposed Presentation Contexts

ZIOSTATION 1.2 is capable of proposing the Presentation Contexts shown in the following table.

**Table 15: Proposed Presentation Contexts**

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Verification SOP Class	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Digital Mammography X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Digital Mammography X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Ext. Neg.
Name	UID	Name List	UID List		
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None
		JPEG Baseline	1.2.840.10008.1.2.4.50	SCP	None
		JPEG Extended	1.2.840.10008.1.2.4.51	SCP	None
		JPEG Lossless, Non-Hierarchical, First-Order Prediction	1.2.840.10008.1.2.4.70	SCP	None
		RLE Lossless	1.2.840.10008.1.2.5	SCP	None
Comprehensive SR Storage	1.2.840.10008.5.1.4.1.1.88.33	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCP	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCP	None

### 2.1.3.1.3 SOP Specific Conformance

#### 2.1.3.1.3.1 SOP Specific Conformance for Verification SOP Class

ZIOSTATION 1.2 provides Standard Conformance as SCP of Verification SOP Class.

#### 2.1.3.1.3.2 SOP Specific Conformance for Storage SOP Class

ZIOSTATION 1.2 can execute multiple C-STORE as Storage Service provider with a single association. The ZIOSTATION 1.2 is Level 2 (Full) conformant as a Storage Service provider. No attributes are overridden and modified. If C-STORE is successful, ZIOSTATION 1.2 stores the DICOM image data to hard disk. The data stored in a hard disk is enabled to access through the user of the OS service or the ZIOSTATION 1.2. The data stored is enable to delete, copy or move by operator's interaction. In the case of association or receiving failure, error messages are shown. No extended negotiation is performed.

#### 2.1.3.1.4 Accepted Presentation Contexts

ZIOSTATION 1.2 is capable of proposing multiple Presentation Contexts. This specification is shown as follows:

(Abstract Syntax + (Transfer Syntax \* Number of Syntax)) \* Number of Syntax

In this case, number of syntax is equal to or greater than 1.



### 2.1.3.1.5 Transfer Syntax Selection Policy

ZIOSTATION 1.2 supports various Transfer Syntax. The selection is decided as follows:

1. The priority list of Transfer Syntax is configured.
2. Propose the Transfer Syntax in order.
3. First conformed Transfer Syntax is selected.

## 2.2 NETWORK PROFILE

### 2.2.1 Supported Protocol Stacks(PS 3.8, PS 3.9)

ZIOSTATION 1.2 provides DICOM V3.0 TCP/IP Network Protocol Stacks support in which stacks are defined in DICOM Standards PS 3.8.

### 2.2.2 OSI Stack

OSI Stack is not supported.

### 2.2.3 TCP/IP Stack

ZIOSTATION 1.2 inherits TCP/IP Stack from runtime environment OS.

### 2.2.4 API

APIs are not released.

### 2.2.5 Physical Device Support

ZIOSTATION 1.2 inherits Physical Device Support from runtime environment OS.

### 2.2.6 Point-to-point stack

Point-to-point stack is not supported.

## 2.3 STANDARD EXTENDED/SPECIALIZED/PRIVATE SOP CLASSES

### 2.3.1 Extended CT, MR, Nuclear Medicine, Positron Emission Tomography, X-Ray Angiographic objects

ZIOSTATION 1.2 is making the following extensions to CT, MR, Nuclear Medicine, Positron Emission Tomography and X-Ray Angiographic SOP Classes:

**Table 16: PRIVATE CREATOR IDENTIFICATION : ZIO\_DICOM\_WORKSPACE\_01**

Tag	Attribute Name	Type	VR
(7109,00XX)	Private Creator	3	LO
(7109,XX21)	Private Data 1	3	OB
(7109,XX23)	Private Data 2	3	OB

### 2.3.2 Extended Secondary Capture object

ZIOSTATION 1.2 is making the following extensions to Secondary Capture SOP Class:

**Table 17: PRIVATE CREATOR IDENTIFICATION : ZIO\_DICOM\_WORKSPACE\_01**

Tag	Attribute Name	Type	VR
(7109,00XX)	Private Creator	3	LO
(7109,XX21)	Private Data 1	3	OB
(7109,XX23)	Private Data 2	3	OB
(7109,XX30)	Private Data 3	3	DS
(7109,XX31)	Private Data 4	3	DS
(7109,XX32)	Private Data 5	3	DS
(7109,XX33)	Private Data 6	3	UI
(7109,XX34)	Private Data 7	3	CS

### 2.3.3 Extended Comprehensive SR object

ZIOSTATION 1.2 is making the following extensions to Comprehensive SR SOP Class:

**Table 18: PRIVATE CREATOR IDENTIFICATION : ZIO\_DICOM\_SR\_01**

Tag	Attribute Name	Type	VR
(710B,00XX)	Private Creator	3	LO
(710B,XXE1)	Private Data 8	3	CS

### 2.3.4 Private SOP Classes

ZIOSTATION 1.2 defines the following Private SOP Classes:

**Table 19: Private SOP Classes**

SOP Class Name	SOP Class UID
Report	1.2.392.200080.300.100
Workspace	1.2.392.200080.300.500

## 2.4 Configuration

### 2.4.1 AE Title/Presentation Address Mapping

AE Title/Presentation Address Mapping are set while in installation by the support engineer.

### 2.4.2 Parameters

The following parameters are available. These are configured during installation by the support engineer.

- AE Title
- IP Address
- Port Number
- Directories to store images
- Priority of Transfer Syntax
- Embed Private Attributes in Secondary Capture Images or not

### 3 MEDIA INTERCHANGE

#### 3.1 IMPLEMENTATION MODEL

##### 3.1.1 Application Data Flow

Application Data Flow is shown in Figure 2.

#### 3.2 AE SPECIFICATIONS

##### 3.2.1 Application Entity Specification

ZIOSTATION 1.2 provides Standard Conformance to the DICOM MediaStorage Service Class.

The Application Profiles and Roles are listed below.

**Table 20: Application Profiles, Activities and Roles**

Application Profiles Supported	Real World Activity	Role
STD-GEN-CD	Export to CD-R	FSC
STD-GEN-CD	Read data from CD-R	FSR

##### 3.2.1.1 Real-World Activities

###### 3.2.1.1.1 Activity - Export to CD-R

ZIOSTATION 1.2 acts as an FSC when requested to export SOP Instances from the local database to a CD-R medium.

The user will be prompted to insert an empty CD-R for each export job. The contents of the export job will be written together with a corresponding DICOMDIR to a singlesession CD-R. Writing in multi-session mode is not supported. The user can cancel an export job in the job queue.

###### 3.2.1.1.1.1 Media Storage Application Profiles

ZIOSTATION 1.2 supports the STD-GEN-CD Application Profile.

###### 3.2.1.1.2 Activity - Read data from CD-R

ZIOSTATION 1.2 acts as an FSR when requested to read data from a CD-R medium.

###### 3.2.1.1.2.1 Media Storage Application Profiles

ZIOSTATION 1.2 supports the STD-GEN-CD Application Profile.

#### 4 SUPPORT OF CHARACTER SETS

ZIOSTATION 1.2 supports the following extended character sets:

- ISO-8859-1 (ISO-IR 100 Latin-1)
- JIS X 0201 (ISO-IR 13 Japanese katakana and ISO-IR 14 Japanese romaji)
- JIS X 0208 (ISO-IR 87 Japanese kanji, hiragana and katakana)
- JIS X 0212 (ISO-IR 159 Supplementary Japanese kanji)