Application Launcher 2.2 DICOM Conformance Statement

Contents

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1 Introduction

1.1 Integration and Features

The integration of medical devices may require functions that are beyond the scope of the DICOM standard. Consequently, using only the information provided by this Conformance Statement does not automatically guarantee interoperability. It is the user's responsibility to analyze thoroughly the application requirements and to specify a solution that integrates our equipment with another.

Our equipment has been tested to assure that the actual implementation of the DICOM interface corresponds with this Conformance Statement. If the Conformance Statements of a third-party product indicates that successful information exchange should be possible, additional interoperability tests may be necessary to ensure interoperability. It is the responsibility of the user (or user's agent) to specify the appropriate test suite and to carry out the additional interoperability tests.

Mirada Medical is committed to adapt its equipment to future versions of the DICOM Standard as much as possible. In order to do so, we reserve the right to make changes to our products or to discontinue them. The user should ensure that any third-party provider, connecting to our equipment, also adapts to future versions of the DICOM Standard. If not, the incorporation of DICOM enhancements into our equipment may lead to loss of connectivity.

Some of the features, described in this document are optional and may not be available in the product. For information on the user licensing please consult your sales representatives or the user documentation, supplied at the time of purchase.

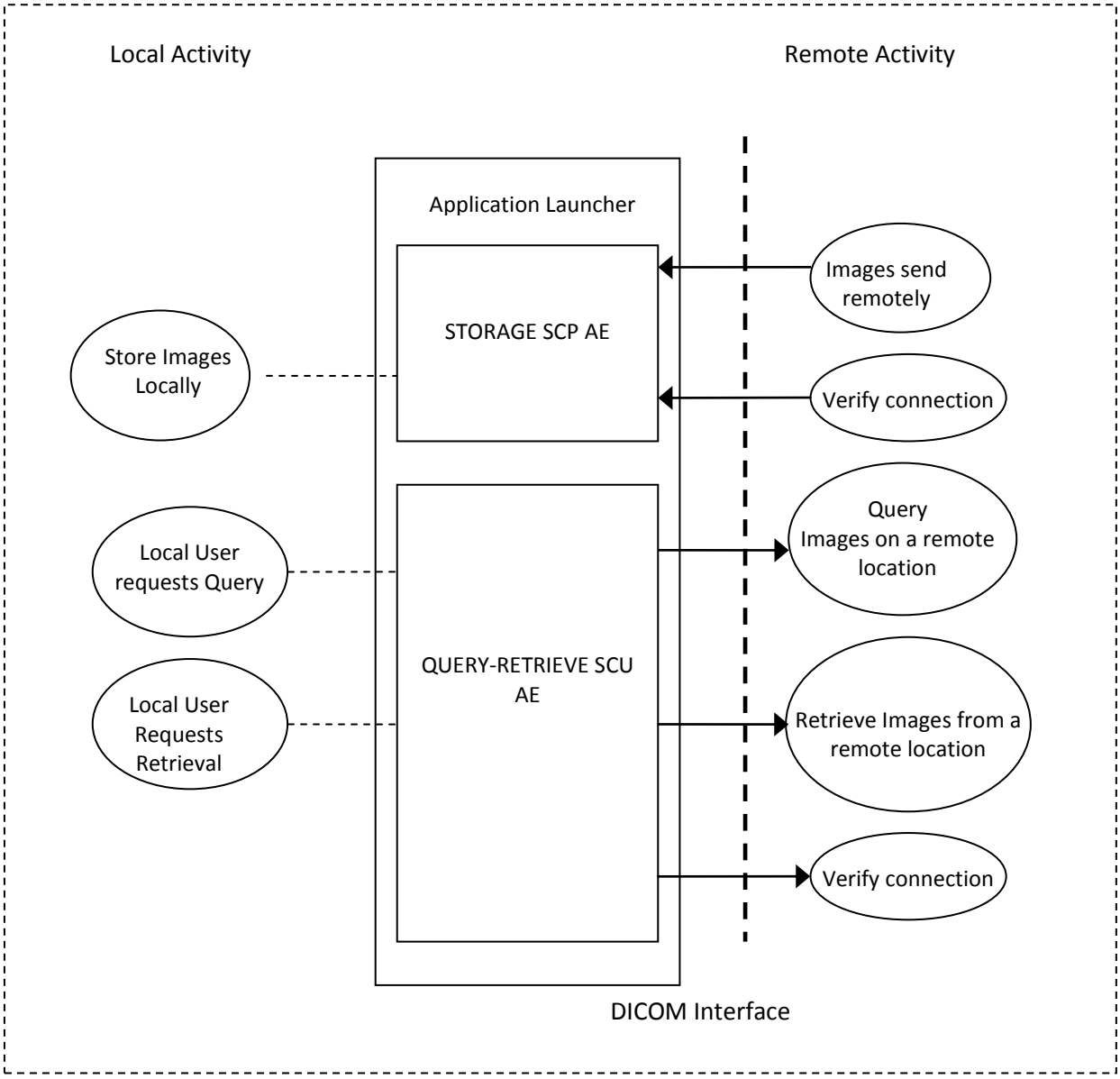
1.2 Definitions

Term	Definition
APLA	Application Launcher (the application to which this DCS is referring to)
DCS	DICOM Conformance Statement
PACS	Picture Archiving and Communication System. An information system which is able to store and archive medical data and radiology images in particular.

2 NETWORKING

2.1 Implementation Model

2.1.1 Application Data Flow Diagram



2.1.2 Functional Definitions of AE's

Conceptually the network services may be modeled as the following Application Entities:

2.1.3 STORAGE-SCP AE

Application Launcher STORAGE SCP AE waits for another application to call and connect. The SCP will accept associations with the Presentation Contexts for SOP classes of the Storage Service Class. It will receive images on these Presentation Contexts and automatically import them into the Application Launcher browser.

2.1.4 QUERY RETRIEVE SCU AE

Application Launcher QUERY-RETRIEVE-SCU AE is activated through the user interface when a user selects a remote AE to query (from a pre-configured list), then initiates a query. Queries are performed recursively from the patient and study through the series and instance level. The lowest level depends on the type of filter (keys) used. The results are displayed in the QR browser. The retrieval function is activated through the user interface when a user selects a study, series or instance from the browser for retrieval. A connection to the remote AE is established to initiate and monitor the retrieval. Object instances will normally be retrieved to the STORAGE-SCP AE as a recipient.

2.1.5 Sequencing of Real-World Activities

User can query a remote image managing device, like PACS or any C-FIND SCP, for available composite instances. It then can request retrieval of such instances from these devices (C-MOVE SCPs) at any time.

Application Launcher receives and temporarily stores medical images, pushed to it from C-STORE SCUs, or retrieved from different modalities (C-MOVE SCPs). A list of all stored objects is displayed in a browser. Icon representations of the images are displayed in the browser, when selected from the list.

Image sets from different modalities or from the same modality can further be loaded into and processed by launching any of the integrated applications and displayed for analysis or clinical review. The results from this processing can temporarily be stored and subsequently exported as standard objects to a remotely situated device, using the DICOM network protocol. For details of the export, refer to the relevant DICOM Conformance Statement for the integrated application.

It is assumed that the imported data is a valid DICOM data. If invalid data is allowed for import on Application Launcher, then it is marked as such and is not allowed for export by the integrated applications. It means Application Launcher may break an external workflow for any invalid data that has been imported.

User transactions from the Application Launcher browser and viewer are automatically synchronised and sequenced with the data processing and network operations so consistency of data is guaranteed.

2.2 AE Specifications

2.2.1 STORAGE-SCP AE

2.2.2 SOP Classes

STORAGE-SCP provides Standard Conformance to the following SOP Classes:

Table 2.2.1-1

SOP CLASSES SUPPORTED BY STORAGE-SCP

SOP Class Name	SOP Class UID	SCU	SCP
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	No	Yes
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	No	Yes
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	No	Yes
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	No	Yes
Secondary Capture Image	1.2.840.10008.5.1.4.1.1.7	No	Yes
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	No	Yes
Verification	1.2.840.10008.1.1	No	Yes

2.2.3 Association Policies

2.2.3.1 General

STORAGE-SCP accepts but never initiates associations.

Table 2.2.1-2

MAXIMUM PDU SIZE RECEIVED FOR STORAGE-SCP

Maximum PDU size received	0 (Unlimited)

The default Maximum PDU Length Received is notified in the Associate-AC message as unlimited. Effectively it will be limited by the system. It is a configurable item and can be set to any number.

2.2.3.2 Number of Associations

Table 2.2.1-3

NUMBER OF ASSOCIATIONS FOR STORAGE-SCP

Maximum number of simultaneous associations	Unlimited

2.2.3.3 Asynchronous Nature

STORAGE-SCP will only allow a single outstanding operation on an Association. Therefore, STORAGE-SCP will not perform asynchronous operations window negotiation.

2.2.3.4 Implementation Identifying Information

Table 2.2.1-4
DICOM IMPLEMENTATION CLASS AND VERSION FOR STORAGE-SCP

Implementation Class UID	1.2.826.0.1.3417726.0.2
Implementation Version Name	as released

2.2.4 Association Initiation Policy

STORAGE-SCP does not initiate associations.

2.2.5 Association Acceptance Policy

When STORAGE-SCP accepts an association, it will respond to storage requests.

2.2.5.1 Activity – Receive Storage Request

2.2.5.1.1 Description and Sequencing of Activities

As instances are received they are copied to the local file system and a record inserted into the local database. If the received instance is a duplicate of a previously received instance, the old file and database record will be overwritten with the new one.

2.2.5.1.2 Accepted Presentation Contexts

Table 2.2.1-5
ACCEPTABLE PRESENTATION CONTEXTS FOR
STORAGE-SCP AND RECEIVE STORAGE REQUEST

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name**	**UID**		
See Table 2.2.1-1.	See Table 2.2.1-1.	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

No extended negotiation is performed, though STORAGE-SCP:

- is a Level 2 Storage SCP (Full – does not discard any data elements);
- Does not support digital signatures;
- Does not coerce any received data elements, though some may subsequently be coerced on export. by the integrated applications.

2.2.5.1.3 SOP Specific Conformance to Storage SOP Classes

STORAGE-SCP provides standard conformance to the Image Storage Service Classes.

In the case of a successful C-STORE operation the object has successfully been written to the local store. The stored SOP Instance can be accessed through the browser, and is kept until

manually removed. If an image is received with the same SOP Instance UID (0008, 0018) as one that already exists in the local store, the new image will replace the old image.

The objects are not fully validated on receive. Some may subsequently fail to load for processing because of incompatibility to each other or to the particular algorithm selected by user. For details of the derivation process consult the user documentation of the integrated applications.

STORAGE-SCP will accept any Presentation Context for the supported SOP Classes.

STORAGE-SCP will behave as described in Table 2.2.1-6 when generating the C-STORE response command message.

Table 2.2.1-6
RESPONSE STATUS FOR STORAGE-SCP AND RECEIVE STORAGE REQUEST

Service Status	Further Meaning	Error Code	Reason
Success	Success	0000	The Composite SOP Instance was successfully received and stored in the system database. No complete IOD verification is performed
Refused	Out of Resources	A700	Indicates that there was not enough disk space to store the image. Error message is output to the Service Log. The SOP Instance will not be saved.
Error	Data Set does not match SOP Class	A900	Indicates that the Data Set does not encode a valid instance of the SOP Class specified. This status is returned if the DICOM Object stream can be successfully parsed but does not contain values for one or more mandatory Elements of the SOP Class. The STORAGE-SCP AE does not perform a comprehensive check, as it only checks a subset of required Elements. In addition, if the SOP Class is for a type of image but the SOP Instance does not contain values necessary for its display then this status is returned. Error message is output to the Service Log. The system can be configured to temporarily save such Data Sets in order to aid problem diagnosis.
	Cannot understand	C000	Indicates that the STORAGE-SCP AE cannot parse the Data Set into Elements or cannot further process the object. Error message is output to the Service Log. The system can be configured to temporarily save such Data Sets in order to aid problem diagnosis.
Warning	Coercion of Data Elements	B000	Not returned

2.2.5.1.4 SOP Specific Conformance to Verification SOP Class

See 2.2.5.2

2.2.5.2 Activity – Verify DICOM Connection

2.2.5.2.1 Description and Sequencing of Activities

An incoming C-ECHO message is received and responded with success.

2.2.5.2.2 Accepted Presentation Contexts

Table 2.2.1-7
ACCEPTABLE PRESENTATION CONTEXTS FOR
STORAGE-SCP AND VERIFY DICOM CONNECTION

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiation**
Name	**UID**	**Name List**	**UID List**		
Verification	1.2.840.10008.1.1	DICOM Implicit VR Little Endian Transfer Syntax	1.2.840.10008.1.2	SCP	None

2.2.5.2.3 SOP Specific Conformance to Verification SOP Class

The STORAGE SCP provides standard conformance. The following message attributes are supported in the response confirmation:

Table 2.2.1-8
C-ECHO PAPAMETERS

DIMSE-C Parameter Name	Req/Ind	Rsp/Conf	Comment
Message ID	M	-	Not present
Message ID Being Responded To	-	M	Same as “Message ID” in Req/Ind
Affected SOP Class UID	M	U(=)	Not present
Status	-	M	Always present

The following status codes are returned:

Table 2.2.1-9
STORAGE-SCP AE C-STORE RESPONSE STATUS RETURN REASONS

Service Status	Further Meaning	Error Code	Reason
Success	Success	0000	The C-ECHO message was received and responded successfully

2.2.6 QUERY-RETRIEVE SCU

2.2.7 SOP Classes

QR-SCU provides Standard Conformance to the following SOP Classes:

SOP CLASSES SUPPORTED BY QUERY-RETRIEVE-SCU

SOP Class Name	SOP Class UID	SCU	SCP
Study Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.2.1	Yes	No
Patient Root Query/Retrieve Information Model- FIND	1.2.840.10008.5.1.4.1.2.1.1	Yes	No
Study Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.2.2	Yes	No
Patient Root Query/Retrieve Information Model- MOVE	1.2.840.10008.5.1.4.1.2.1.2	Yes	No
Verification	1.2.840.10008.1.1	Yes	No

2.2.8 Association Policies

2.2.8.1 General

QR-SCU initiates but never accepts associations.

Maximum PDU size received

Maximum PDU size received	65536

The default Maximum PDU Length Received is notified in the Associate-AC message. It is a configurable item and can be set to any number.

2.2.8.2 Number of Associations

Number of Associations for QR-SCU

Maximum number of simultaneous associations	1 for FIND n for MOVE

2.2.8.3 Asynchronous Nature

QR-SCU will only allow a single outstanding operation on an Association. Therefore, it will not perform asynchronous operations window negotiation.

2.2.8.4 Implementation Identifying Information

DICOM Implementation Class and Version for QR-SCU

Implementation Class UID	1.2.826.0.1.3680043.8.691.16
Implementation Version Name	as released

2.2.9 Association Initiation Policy

2.2.9.1 Activity – Local User Requests Query

QR-SCU attempts to initiate a new association when the user performs the query action from the user interface. If this involves recursive queries for lower query levels in the hierarchy, these will be performed on the same association.

2.2.9.1.1 Description and Sequencing of Activities

A single attempt will be made to query the remote AE. If the query fails, for whatever reason, no retry will be performed.

2.2.9.1.2 Proposed Presentation Contexts

Proposed Presentation Contexts for QR-SCU and Query Remote AE

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
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
		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
Patient Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.1.1	As above	As above	SCU	None

QR-SCU will propose one Presentation Context from the above table with all of the supported Transfer Syntaxes. No extended negotiation is performed. In particular, relational queries are not supported.

2.2.9.1.3 SOP Specific Conformance to C-FIND SOP Classes

QR-SCU provides standard conformance to the supported C-FIND SOP Classes.

All queries are initiated at the highest level of the information model (the PATIENT or STUDY level), and then for each response received, recursively repeated at the next lower level (SERIES and IMAGE) if necessary, in order to completely elucidate the “tree” of objects

available on the remote AE. From this tree the user may subsequently request retrieval at any level. The lowest level will depend on the set of keys, requested by the user.

Requested return attributes not returned by the SCP are ignored. Non-matching responses returned by the SCP due to unsupported (hopefully optional) matching keys are not filtered locally by the QR-SCU and thus will still be presented in the browser. No attempt is made to filter out duplicate responses.

Case sensitivity for Patient Name or other attributes will depend on the actual query target (C-FIND SCP). Generally, all matching is case sensitive, except for attributes with VR of PN, which may be case insensitive if supported by the SCP.

Specific Character Set will not be included in the request identifier. If present in the response, it will be used to display the correct character set, if supported.

Cancel request will be sent to the remote AE on user request. Pending responses will continue to be received and displayed until final status is received.

The tables below list the supported query keys.

PATIENT ROOT KEYS FOR QR-SCU

Name	Tag	Types of Matching	Comment
PATIENT Level			
Patient's ID	(0010,0020)	S,*,U	
Patient's Name	(0010,0010)	S,*,U	
Patient's Sex	(0010,0040)	U	return only
Patient's Birth Date	(0010,0030)	U	return only
STUDY Level			
Not used			
SERIES Level			
Not used			
INSTANCE Level			
Not used			
All Levels			
Instance Availability	(0008,0056)	none	Not present in the Request Identifier. Displayed if present in the response.

STUDY ROOT KEYS FOR QR-SCU

Name	Tag	Types of Matching	Comment
STUDY Level			
Patient's ID	(0010,0020)	S,*,U	
Patient's Name	(0010,0010)	S,*,U	

Study ID	(0020,0010)	S,*,U	
Study Date	(0008,0020)	S,U,R	
Study Time	(0008,0030)	U,R	
Accession Number	(0008,0050)	S,*,U	
Study Instance UID	(0020,000D)	S,U	
Patient's Sex	(0010,0040)	U	return only
Patient's Birth Date	(0010,0030)	U	return only
Modalities In Study	(0008,0061)	S,* U	
Referring Physician's Name	(0008,0090)	S,*,U	
SERIES Level			
Series Number	(0020,0011)	S, U	
Modality	(0008,0060)	S, *,U	
Series Instance UID	(0020,000E)	S,U	
Performed Procedure Step Start Date	(0040,0244)	S,U,R	
Performed Procedure Step Start Time	(0040,0245)	U,R	
Request Attribute Sequence	(0040,0275)	S,U	Sequence contains only one item or none
> Requested Procedure ID	(0040,1001)	S,*,U	
> Scheduled Procedure Step ID	(0040,0009)	S,*,U	
Series Description	(0008,103E)	U	Return only
INSTANCE Level			
Instance Number	(0020,0013)	S, U	
SOP Instance UID	(0008,0018)	S,U	
SOP Class UID	(0008,0016)	U	Return only. (Displayed in human readable form)
All Levels			
Instance Availability	(0008,0056)	none	Not present in the Request Identifier. Displayed if present in the response.

Types of Matching:

An "S" indicates the identifier attribute uses Single Value Matching (with possible Value Multiplicity), an "R" indicates Range Matching, an "*" indicates wildcard matching with "*" or "?" symbols, an 'U' indicates Universal Matching (zero value length). Universal matching is also automatically used to request the values of the attribute to be returned.

QR-SCU will behave as described in the following Table in response to the status returned in the C-FIND response command message(s).

RESPONSE STATUS FOR C-FIND REQUEST

Service Status	Further Meaning	Status Codes	Behavior
Refused	Out of Resources	A700	Current query is terminated and displays as failed. Query result up to this point (if any) is displayed
Error	Identifier does not match SOP Class	A900	Current query is terminated and displays as failed. No result is displayed
Error	Unable to process	Cxxx	Current query is terminated and displays as failed. No result is displayed
Cancel	Matching terminated due to Cancel request	FE00	Current query is terminated; The result set up to this point is displayed
Success	Matching is complete - No final Identifier is supplied	0000	Current query is terminated; The result set is displayed
Pending	Matches are continuing - Current Match is supplied and any Optional Keys were supported in the same manner as Required Keys	FF00	Identifier is used to populate the browser. Continues operation.
	Matches are continuing - Warning that one or more Optional Keys were not supported for existence and/or matching for this Identifier	FF01	Identifier is used to populate the browser Continues operation

2.2.9.2 Activity – Local User Requests Retrieve

QR-SCU attempts to initiate a new association when the user performs the retrieve action from the user interface.

2.2.9.2.1 Description and Sequencing of Activities

For the entity (patient, study, series or instance) selected from the user interface to be retrieved, a single attempt will be made to retrieve the entity from the selected remote AE. If the retrieve fails, for whatever reason, no retry will be performed.

2.2.9.2.2 Proposed Presentation Contexts

PROPOSED PRESENTATION CONTEXTS FOR C-MOVE

Presentation Context Table			
Abstract Syntax	**Transfer Syntax**	**Role**	**Extended**

Name	UID	Name	UID		Negotiation
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
		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
Patient Root Query/Retrieve Information Model-MOVE	1.2.840.10008.5.1.4.1.2.1.2	As above	As above	SCU	None

QR-SCU will propose one Presentation Context from the above table with all of the supported Transfer Syntaxes. No extended negotiation is performed. In particular, relational retrievals are not supported.

2.2.9.2.3 SOP Specific Conformance to C-MOVE SOP Class

QR-SCU provides standard conformance to the supported C-MOVE SOP Classes.

Only information models Patient Root and Study Root are supported.

The retrieval will be performed at the PATIENT, STUDY, SERIES or INSTANCE level depending on what level of entity has been selected by the user in the browser.

The retrieval request is sent to the AE that was specified in the Retrieve AE attribute returned from a query previously performed by QR-SCU. The instances are retrieved to the currently selected destination AE (the receiving STORAGE-SCP AE). This implies that the remote C-MOVE SCP must be preconfigured to know the IP address corresponding to the receiving STORAGE-SCP AE. The receiving STORAGE-SCP normally is the local STORAGE-SCP. The local STORAGE-SCP AE will accept storage requests addressed to it from anywhere, so no pre-configuration of the local application to accept from the remote AE is necessary (except in so far as it was necessary to configure the QR-SCU to retrieve to its own recipient).

PATIENT ROOT REQUEST IDENTIFIER FOR C-MOVE

Name	Tag	Unique, Matching or Return Key
PATIENT level		
Patient ID	(0010,0020)	U
STUDY level		
Study Instance UID	(0020,000D)	U
SERIES level		
Series Instance UID	(0020,000E)	U
INSTANCE level		

SOP Instance UID	(0008,0018)	U

STUDY ROOT REQUEST IDENTIFIER FOR C-MOVE

Name	Tag	Unique, Matching or Return Key
STUDY level		
Study Instance UID	(0020,000D)	U
SERIES level		
Series Instance UID	(0020,000E)	U
INSTANCE level		
SOP Instance UID	(0008,0018)	U

QR-SCU will behave as described in the Table below in response to the status returned in the C-MOVE response command message(s).

RESPONSE STATUS FOR C-MOVE

Service Status	Further Meaning	Status Codes	Related Fields	Behavior
Refused	Out of Resources - Unable to calculate number of matches	A701	(0000,0902)	Retrieval is terminated
Refused	Out of Resources - Unable to perform sub-operations	A702	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	Retrieval is terminated
Refused	Move Destination unknown	A801	(0000,0902)	Retrieval is terminated
Failed	Identifier does not match SOP Class	A900	(0000,0901) (0000,0902)	Retrieval is terminated
Failed	Unable to process	Cxxx	(0000,0901) (0000,0902)	Retrieval is terminated
Cancel	Sub-operations terminated due to Cancel Indication	FE00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	Retrieval is terminated
Warning	Sub-operations Complete - One or more Failures	B000	(0000,1020) (0000,1022) (0000,1023)	Retrieval is terminated
Success	Sub-operations Complete - No Failures	0000	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	Retrieval is terminated

Pending	Sub-operations are continuing	FF00	(0000,1020) (0000,1021) (0000,1022) (0000,1023)	Retrieval continues

2.2.9.2.3.1 Sub-operation dependent behavior

Once the C-MOVE has been initiated it runs to completion (or failure) as described in the C-MOVE response command message(s). There is no attempt by MOVE-SCU to verify that instances have actually been successfully received or locally stored, other than through the final response C-MOVE identifier, which is expected to contain the number of successfully completed sub-operations.

Whether or not completely or partially successfully retrievals are made available in the local database to the user is purely dependent on the success or failure of the C-STORE sub-operations, which may be different from the information supplied in the final C-MOVE SCP response. It is responsibility of the SCP to guarantee consistency between the C-MOVE status response and the successful C-STORE sub-operations.

Whether or not the remote AE attempts to retry any failed C-STORE sub-operations is beyond the control of MOVE-SCU.

If the association on which the C-MOVE was issued is aborted for any reason, whether or not the C-STORE sub-operations continue is dependent on the remote AE. The local STORAGE-SCP will continue to accept associations and storage operations.

2.2.9.3 Activity –Verify Connection

QR-SCU attempts to initiate a new association when the user performs DICOM echo (ping) from the user interface.

2.2.9.3.1 Description and Sequencing of Activities

A DICOM C-ECHO command will be sent to the remote AE and the response will be received and checked.

2.2.9.3.2 Proposed Presentation Contexts

Proposed Presentation Contexts for C-ECHO to Remote AE

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended Negotiation
Name	UID	Name	UID		
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None
		Explicit VR Little Endian	1.2.840.10008.1.2.1	SCU	None
		Explicit VR Big Endian	1.2.840.10008.1.2.2	SCU	None

QR-SCU will propose one Presentation Context with all of the supported Transfer Syntaxes.

2.2.9.3.3 SOP Specific Conformance to Verification SOP Class

QR-SCU provides standard conformance to the supported Verification SOP Class. The following message attributes are supported:

C-ECHO PAPAMETERS

DIMSE-C Parameter Name	Req/Ind	Rsp/Conf	Comment
Message ID	M	-	May not be present in the response
Message ID Being Responded To	-	M	Must be same as "Message ID" in Req/Ind
Affected SOP Class UID	M	U(=)	May not be present in the response
Status	-	M	

The following status codes are processed:

QR-SCU AE C-ECHO RESPONSE STATUS HANDLING

Service Status	Further Meaning	Error Code	Action
Success	Success	0000	User will receive confirmation for successful operation
Failure	Failure	Any other	User will receive indication for a failed operation

2.2.10 Association Acceptance Policy

QR-SCU does not accept associations.

2.3 Network Interfaces

2.3.1 Physical Network Interface

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

2.3.2 Additional Protocols

When host names rather than IP addresses are used in the configuration properties to specify presentation addresses for remote AEs, the application is dependent on the name resolution mechanism of the underlying operating system.

2.4 Configuration

Configuration can be performed using the application user interface or by directly editing configuration files. Refer to the online help for specific details.

2.4.1 AE Title/Presentation Address Mapping

The mapping of the logical name by which remote AEs are described in the user interface to Called AE Titles as well as presentation address (hostname or IP address and port number) is configurable.

2.4.2 Parameters

The following parameters are configurable for the STORAGE SCP AE:

- AE Title
- AE Port
- Maximum PDU Length Received
- Storage Folder- the folder where incoming objects are stored temporarily.

The following parameters can be configured for the QR SCU AE:

- Its own AE Title
- Remote C-FIND target AEs, with their AE Titles, IP Addresses/ Host Names and Ports
- Remote C-MOVE target AEs, with their IP addresses and Ports (if different from above)
- Remote C-MOVE Destination AEs (the C-STORE SCPs), with their AE Titles
- Maximum PDU Length Received

3 MEDIA INTERCHANGE

The application reads (Imports) and writes (Exports) Media Part 10 compliant file contents on any available media, supported by the system on which the application is deployed.

No DICOMDIR or any of the Media Interchange Profiles are supported.

4 SUPPORT OF CHARACTER SETS

No extended character sets are supported

5 SECURITY

5.1 Security Profiles

None of the DICOM security profiles is supported. Security is achieved by other means.

5.2 Association level security

None supported.

Any Calling AE Titles and/or IP addresses may open an Association.

5.3 Application level security

None supported.

6 ANNEXES

6.1 IOD contents

6.1.1 Created SOP Instances

None

6.1.2 Usage of attributes from received IOD's

No SOP Class specific fields are required- usage is according to the DICOM standard.

The application makes use of the conventional identification attributes to distinguish patients, studies, series and instances. In particular, if two patients have the same value for Patient ID, they will be treated as the same in the browser.

6.1.3 Attribute Mapping

Not applicable.

6.1.4 Coerced/Modified Instances

None

6.2 Data Dictionaries

NA

6.3 Coded terminology

The value for Code Meaning will be displayed for all code sequences. No local lexicon is provided to look up alternative code meanings.

6.4 Grayscale Image Consistency

Calibration to the Grayscale Standard Display Function (GSDF) is outside of the scope of this document

6.5 Standard extended SOPs

None

6.6 Private SOPs

Private SOPs are outside of the scope of this document.

6.7 Private Transfer Syntaxes

None