

DICOM Correction Proposal

STATUS	Assigned
Date of Last Update	2024-03-18
Person Assigned	Bjorn Nolte
Submitter Name	Jörg Riesmeier <dicom@jriesmeier.com>
Submission Date	2024-03-14

Correction Number	CP- 2403
Log Summary:	Fix wrong use of Association-related terms in PS3.2 Annex N
Name of Standard	PS3.2 2024a
Rationale for Correction:	<p>In various sections of DICOM PS3.2 Annex N, it appears that the concepts of Association Requestor / Association Acceptor and Service Class User (SCU) / Service Class Provider (SCP) are mixed up, or are even equated, for example in Section N.6.2. Of course, these terms do not refer to the same concepts. Also Calling AE Title and Called AE Title are concepts that are related to Association Negotiation, i.e. to the terms Association Requestor and Association Acceptor. SCU and SCP are related to the roles that an implementation plays for a particular Service during an Association.</p> <p>In other words: An Association Requestor can also play the role of an SCP, and an Association Acceptor can play the role of an SCU.</p> <p>It is, therefore, proposed to change this “wrong use of terms” in DICOM PS3.2 Annex N.</p> <p>It is also proposed to consistently use the terms “Calling AE Title” and “Called AE Title” instead of “Calling AET” and “Called AET” throughout PS3.2. These changes can also be found below.</p> <p>Furthermore, it is proposed to fix various other inconsistencies regarding the spelling of terms as well as the use of undefined abbreviations and punctuation.</p> <p><i>Open Issue:</i> According to PS3.4 Section J.3.6.1, a Storage Commitment SCU “shall specify the duration of applicability of the Transaction UID”. This information cannot be found in the instructions of PS3.2 Annex N or in the examples such as the Storage Commitment Service Configuration Sections N.6.2.6 or N.6.3.5. There is also other required information related to this and to other DICOM services that is not mentioned in Annex N. Shouldn't this information (e.g. instructions and examples) also be added to PS3.2 Annex N in order to facilitate the creation of DICOM Conformance Statements?</p>
Correction Wording:	

Change PS3.2 Section N.6.2

N.6.2 Configuration of DIMSE Services

The tables in the following subsections show the configuration parameters required for DIMSE Services.

In order to identify whether <product> is an **SCPAssociation Acceptor** and / or an **SCUAssociation Initiator**, the following applies:

- **SCPAssociation Acceptor:** The (Secured) Local Called AE_Title and Remote Calling AE_Title parameters are present.

- **SCUAssociation Initiator:** The (Secured) Local Calling AE Title and Remote Called AE Title parameters are present.

[Use this table template in each supported DIMSE Service section, similar to the example tables provided and provide information as needed for the product implementation. "Local Configuration Parameters" describes parameters for the product described in this DCS, whereas "Remote Configuration Parameters" describes the information needed for this product to interface with a remote system.

Remove rows for any unsupported parameters. For example, if <product> is an **SCUAssociation Initiator** only, remove the rows for Called AE Title and Ports in the "Local Configuration Parameters" part of the table and the Calling AE Title row in the "Remote Configuration Parameters" part. If <product> is an **SCPAssociation Acceptor** only, remove the Calling AE Title row in the "Local Configuration Parameters" part and remove the rows for the Called AE Title, Ports and Host from the "Remote Configuration Parameters" part.

If your product implementation supports multiple AE Titles for the same service, list all of them in separate rows and describe their use in the "Comments" column.

Commented [JR1]: Is this "definition" is really useful? An Association Initiator initiates Associations and an Association Acceptor accepts Associations. This should be clear already from their names.

Maybe, this part of the section can also be removed, as details are already explained in the paragraph starting with "Remove rows..."

Commented [JR2]: These paragraphs should be printed in details as they belong to the instructions (they are within the square brackets).

Local Configuration Parameters - <service name>			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title- (SCU)			
Called AE Title- (SCP)			
Port			
TLS-Secured Port			
<Specific service parameter>			
Remote Configuration Parameters - <service name>			
[Either document the number of supported remote hosts, e.g., <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title- (SCU)			
Called AE Title- (SCP)			
Port			
TLS-Secured Port			
Host			
<Specific service parameters>			

Commented [JR3]: Make these rows italics?

Commented [JR4]: Make this row and similar rows in the following tables bold (and in this case also italics?).

Commented [JR5]: Make this row and similar rows in the following tables bold (and in this case also italics?).

]

N.6.2.1 Basic Worklist Management Service Configuration

Table N.6-2 lists Worklist Service configuration parameters:

Table N.6-2. Worklist Service Parameters

Local Worklist Configuration Parameters - Worklist Service			
Parameter	Configurable	Default Value	Comments
[This example shows configuration for a Modality Worklist SCU, e.g., a modality.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title (SCU)	SERVICE	WORKLIST_AE	
Default Modality type	USER	CR	Used to query the Modality Wor SCP. Possible choices are CR, DX, RF. Commented [JR6]: Remove this word?
Default Scheduled Station AE Title	SERVICE		Used to query the remote Modality Worklist SCP.
Remote Configuration Parameters - Worklist Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Called AE Title (SCP)	SERVICE		Can be connected to up to 3 IRIS . Commented [JR7]: Need to explain this abbreviation?
Port	SERVICE	104	
TLS-Secured Port	FIXED	2762	
Host	SERVICE		

N.6.2.2 Modality Performed Procedure Step Service Configuration

Table N.6-3 lists Modality Performed Procedure Step Service configuration parameters:

Table N.6-3. MPPS Service Parameters

Local Configuration Parameters - MPPS Service			
Parameter	Configurable	Default Value	Comments
[This example shows configuration for an MPPS SCU and SCP, e.g., a PACS.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]

Local Configuration Parameters - MPPS Service			
Parameter	Configurable	Default Value	Comments
Calling AE Title-(SCU)	SERVICE	STORE_AE	<i>By default, the system uses the same Calling AE Title as for the Storage SCU service-by default.</i>
Called AE Title-(SCP)	SERVICE	STORE_AE	<i>By default, the system uses the same eCalled AE Title as for the Storage SCP service-by default.</i>
Port	FIXED	104	
TLS-Secured Port	FIXED	2762	
Remote Configuration Parameters - MPPS Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE		
Called AE Title-(SCP)	SERVICE		
Port	SERVICE	104	
TLS-Secured Port	SERVICE	2762	
Host	SERVICE		
Rely on MPPS complete sent by modality	SERVICE	unchecked	If checked, the PPS will be considered as completed when the modality sends the MPPS N-SET "COMPLETED" message.

Commented [JR8]: Italicize?

N.6.2.3 Unified Worklist and Procedure Step Service Configuration

Table N.6-4 lists Unified Worklist and Procedure Step Service configuration parameters:

Table N.6-4. Unified Worklist and Procedure Step Service Parameters

Local Configuration Parameters - Unified Worklist and Procedure Step Service			
Parameter	Configurable	Default Value	Comments
[This example shows configuration for an UPS SCU, e.g., a Modality acting as a work_item creator.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE	WORKLIST_AE	
Remote Configuration Parameters - Unified Worklist and Procedure Step Service			

Local Configuration Parameters - Unified Worklist and Procedure Step Service			
Parameter	Configurable	Default Value	Comments
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Called AE Title-(SCP)	SERVICE		
Port	SERVICE	104	
TLS-Secured Port	SERVICE	2762	
Host	SERVICE		

N.6.2.4 Instance Availability Notification Service Configuration

Table N.6-5 lists Instance Availability Notification Service configuration parameters:

Table N.6-5. Instance Availability Notification Service Parameters

Local Configuration Parameters - Instance Availability Notification Service			
Parameter	Configurable	Default Value	Comments
[This example shows configuration for an Instance Availability Notification SCU, e.g., a PACS.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE	IAN_AE	
Remote Configuration Parameters - Instance Availability Notification Service			
[Either document the number of supported remote hosts, e.g., <Product> supports configuration of up to <X> remote hosts, or state that there is no limitation other than the ones mandated by the operating system.]			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Called AE Title-(SCP)	SERVICE		
Port	SERVICE	104	
Host	SERVICE		

Commented [JR9]: Italicize?

N.6.2.5 Storage Service Configuration

Table N.6-6 lists Storage Service configuration parameters:

Table N.6-6. Storage Service Parameters

Local Configuration Parameters - Storage Service			
Parameter	Configurable	Default Value	Comments
[This example shows the configuration for a Storage SCU and SCP, e.g., a PACS.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE	STORE_AE	
Called AE Title-(SCP)	SERVICE	STORE_AE	List of AE Titles can be configured depending on the usage (study to be verified or not; studies not to be archived; study to be displayed only...)
Port	FIXED	104	For studies to be displayed only (not imported in DB/cache, the default port is 110).
TLS-Secured Port	FIXED	2762	
Supported Transfer Syntaxes as <u>an</u> SCP	SERVICE	See Table N.1-2	Can force to accept ILE only.
Supported Storage SOP Classes as <u>an</u> SCP	SERVICE	See Table N.1-1	Can add or remove Storage SOP Classes.
Remote Configuration Parameters - Storage Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE		
Called AE Title-(SCP)	SERVICE		
Port	SERVICE	104	
Host	SERVICE		
Inbound PID-Issuer to use	SERVICE		In case the remote Storage SCU does not send an issuer of Patient ID, you can define a default inbound Patient ID issuer.
Outbound Issuer of Patient ID default	SERVICE		In case there are several PID/issuers for the study to send, the default PID/issuer can be selected to be sent as the primary Patient ID to the remote s Storage SCP.

N.6.2.6 Storage Commitment Service Configuration

Table N.6-7 lists Storage Commitment Service configuration parameters:

Table N.6-7. Storage Commitment Service Parameters

Local Configuration Parameters - Storage Commitment Service			
Parameter	Configurable	Default Value	Comments
[This example shows the <u>configuration</u> for a Storage Commitment SCU and SCP, e.g., a PACS.]	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE	STORE_AE	By default, T the system uses the same Calling AE Title as for the Storage SCU-service-by default.
Called AE Title-(SCP)	SERVICE	STORE_AE	By default, T the system uses the same Called AE Title as for the Storage SCP-service-by default.
Port	SERVICE	104	
TLS-Secured Port	FIXED	2762	
Delay to send N-ACTION-RQ	SERVICE	300	
Delay to send N-EVENT-REPORT-RQ	FIXED	immediately	As soon as the N-ACTION-RQ is received, the system will initiate an Association to send the N-EVENT-REPORT-RQ.
N-EVENT-REPORT on same Association	FIXED	asynchronous	When the system receives a N-ACTION-RQ, it will open a new Association to send the N-EVENT-REPORT-RQ. When the system sends an N-ACTION-RQ, it expects to receive the N-EVENT-REPORT-RQ in a separate Association.
Remote Configuration Parameters - Storage e Commitment Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	[If there is no default, leave blank.]	[Provide comments or Values/ranges if applicable.]
Calling AE Title-(SCU)	SERVICE		
Called AE Title-(SCP)	SERVICE		
P Port	SERVICE	104	
TLS-Secured Port	SERVICE	2762	
Host	SERVICE		

Commented [JR10]: Italicize the complete text

Commented [JR11]: Italicize?

Commented [JR12]: Italicize?

Commented [JR13]: Does that mean that receiving the N-EVENT-REPORT-RQ on the same Association is not supported?

Is there a configurable delay that specifies how long the SCU will wait for the N-EVENT-REPORT-RQ on the same Association or is the Association released immediately after sending the N-ACTION-RQ?

N.6.2.7 Query/Retrieve Service Configuration

Table N.6-8 lists Query/Retrieve Service configuration parameters:

Table N.6-8. Query/Retrieve Service Parameters

Local Configuration Parameters - Query/Retrieve Service			
Parameter	Configurable	Default Value	Comments
<i>[This example shows the configuration for a Query-/Retrieve SCU and SCP, e.g., a PACS.]</i>	<<USER SERVICE FIXED>>	<i>[If there is no default, leave blank.]</i>	<i>[Provide comments or Values/ranges if applicable.]</i>
Calling AE Title-(SCU)	SERVICE	QUERY_AE	The same Calling AE_ <u>Title</u> is used for Query and Retrieve_
Called AE Title-(SCP)	SERVICE	QUERY_AE	The same Called AE_ <u>Title</u> is used for Query and Retrieve_
Port	FIXED	104	
TLS-Secured Port	FIXED	2762	
Send C-MOVE-RSP <u>messages</u> with Pending Status to the C-MOVE SCU during the retrieve process	FIXED	5 seconds	
Remote Configuration Parameters - Query/Retrieve Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	<i>[If there is no default, leave blank.]</i>	<i>[Provide comments or Values/ranges if applicable.]</i>
Calling AE Title-(SCU)	SERVICE		
Called AE Title-(SCP)	SERVICE		
Port	SERVICE		
TLS-Secured Port	SERVICE		
Host	SERVICE		

N.6.2.8 Print Management Service Configuration

Table N.6-9 lists Print Management Service configuration parameters:

Table N.6-9. Print Management Service Parameters

Local Configuration Parameters - Print Management Service			
Parameter	Configurable	Default Value	Comments
<i>[This example shows the configuration for a Print SCU, e.g., a modality.]</i>	<<USER SERVICE FIXED>>	<i>[If there is no default, leave blank.]</i>	<i>[Provide comments or Values/ranges if applicable.]</i>
Calling AE Title- (SCU)	FIXED	PRINT_AE	
Remote Configuration Parameters - Print Management Service			
Parameter	Configurable	Default Value	Comments
	<<USER SERVICE FIXED>>	<i>[If there is no default, leave blank.]</i>	<i>[Provide comments or Values/ranges if applicable.]</i>
Called AE Title- (SCP)	SERVICE		
Port	SERVICE	104	
Host	SERVICE		
printer template	SERVICE		A pre-defined printer template can be selected in a drop down list. Select "generic" if the printer template does not exist.
Film sizes supported by the Print SCP	USER	All film sizes available	Select the film sizes whichthat are relevant for the connected printer.

Commented [JR14]: Italicize?