

## DICOM Correction Item

Correction Number	CP-466
Log Summary: Normalized SOP Instance and Class UID requirements	
Type of Modification	Name of Standard
Clarification	PS 3.4 2004
Rationale for Correction  In PS 3.3, the SOP Common Module is defined as mandatory for all normalized IODs defined in Annex B. The SOP Common Module contains a description of the use of SOP Instance UID (0008,0018) and SOP Class UID (0008,0016) in Composite IODs, but subtly implies that they are not present under other circumstances.  Nowhere is it explicitly specified in PS 3.3 or PS 3.4 that these Attributes are not actually used in normalized operations and notifications, but rather that their values are used in different data elements in the request primitives described in PS 3.7.  It is proposed to add common text to section 5.4 of PS 3.4 to clarify this.	
Sections of documents affected  PS 3.4 5.4	
Correction Wording:	

*Add text to the end of PS 3.4 Section 5.4:*

### 5.4 USAGE SPECIFICATION

The building blocks of SOP Classes are Modules and DIMSE Services. The DIMSE Services associated with a SOP Class may be Mandatory (M) or Optional (U). The usage may be different for the SCU and SCP. The usage is specified as a pair of letters: the former indicating the SCU usage, the latter indicating the SCP usage.

...

**For all N-CREATE, N-SET, N-GET, N-DELETE, N-ACTION and N-EVENT-REPORT operations, the SOP Class is conveyed in the request primitive in Affected SOP Class UID (0000,0002). The SOP Class UID (0008,0016) Attribute shall not be present in the Data Set.**

**For N-CREATE operations and N-EVENT-REPORT notifications, the SOP Instance is conveyed in Affected SOP Instance UID (0000,1000). The SOP Instance UID (0008,0018) Attribute shall not be present in the Data Set.**

**Note: In some Service Classes, the SOP Class definition may override the general provision in PS 3.7 that allows the SOP Instance UID to be specified or omitted in the N-CREATE request primitive, and require that the SCU be responsible for specifying the SOP Instance UID.**

**For N-SET, N-GET, N-ACTION and N-DELETE operations, the SOP Instance is conveyed in Requested SOP Instance UID (0000,1001). The SOP Instance UID (0008,0018) Attribute shall not be present in the dataset.**

*Tidy up some places where specific reference to the request primitive is not made:*

#### **F.4.2.3.2 Service Class User**

The SCU uses the N-GET Service Element to request the SCP to get a Study Component Management SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved. The SCU shall be permitted to request that Attribute Values be returned for any Study Component Management SOP Class Attribute specified in Section F.4.2.3.1. Additionally, values may be requested for optional Study Component IOD Attributes.

...

#### **F.7.2.1 CREATE Modality Performed Procedure Step SOP Instance**

...

The same SOP Instance UID is shared by all three Modality Performed Procedure Step SOP Classes. This means that the SOP Instance created and set using the services of the Modality Performed Procedure Step SOP Class can be retrieved using its SOP Instance UID within the service of the Modality Performed Procedure Step Retrieve SOP Class. Changes in its state can be notified by using its SOP Instance UID within the service of the Modality Performed Procedure Step Notification SOP Class. The SOP Class UID specified in the DIMSE N-CREATE and N-SET **Services request primitives** shall be the UID of the Modality Performed Procedure Step SOP Class.

...

#### **F.8.2.1 GET Performed Procedure Step Information**

...

The same SOP Instance UID is shared by all three Modality Performed Procedure Step SOP Classes. This means that the SOP Instance created and set using the services of the Modality Performed Procedure Step SOP Class can be retrieved using its SOP Instance UID within the service of the Modality Performed Procedure Step Retrieve SOP Class. Changes in its state can be notified by using its SOP Instance UID within the service of the Modality Performed Procedure Step Notification SOP Class. The SOP Class UID specified in the DIMSE N-GET **Service request primitive** shall be the UID of the Modality Performed Procedure Step Retrieve SOP Class.

...

#### **F.8.2.1.2 Service Class User**

The SCU uses the N-GET Service Element to request the SCP to get a Modality Performed Procedure Step Retrieve SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved, which is a UID of a Modality Performed Procedure Step SOP Instance. The SCU shall be permitted to request that Attribute Values be returned for any Modality Performed Procedure Step Retrieve SOP Class Attribute specified in Table F.8.2-1. Additionally values may be requested for optional Modality Performed Procedure Step IOD Attributes.

...

#### **F.9.2.1 Receive Modality Performed Procedure Step Event Notification**

...

The same SOP Instance UID is shared by all three Modality Performed Procedure Step SOP Classes. This means that the SOP Instance created and set using the services of the Modality

Performed Procedure Step SOP Class can be retrieved using its SOP Instance UID within the service of the Modality Performed Procedure Step Retrieve SOP Class. Changes in its state can be notified by using its SOP Instance UID within the **service request primitive** of the Modality Performed Procedure Step Notification SOP Class. ~~The SOP Class UID specified in the DIMSE N-EVENT-REPORT Service shall be the UID of the Modality Performed Procedure Step Notification SOP Class.~~

The Modality Performed Procedure Step Notification SOP Instance UID shall not be used to identify a SOP Instance of the Study Component Service Class.

#### **F.9.2.2 Provide Modality Performed Procedure Step Event Notification**

...

The SCP shall specify in the N-EVENT-REPORT request primitive the UID of the Modality Performed Procedure Step SOP Instance with which the event is associated and the Event Type ID. **The Affected SOP Class UID specified in the DIMSE N-EVENT-REPORT request primitive shall be the UID of the Modality Performed Procedure Step Notification SOP Class.**

Note: The encoding of Notification Event Information is defined in PS 3.7.

...

#### **F.11.2.3.2 Service Class User**

The SCU uses the N-GET Service Element to request the SCP to get a General Purpose Performed Procedure Step SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved. The SCU shall be permitted to request that Attribute Values be returned for any General Purpose Performed Procedure Step SOP Class Attribute specified in Table F.11.2-3. Additionally values may be requested for optional General Purpose Performed Procedure Step IOD Attributes.

...

#### **H.4.1.2.3.2 Behavior**

The SCU uses the N-DELETE to request the SCP to delete the Basic Film Session SOP Instance hierarchy. The SCU shall specify **in the N-DELETE request primitive of** the SOP Instance UID of the Basic Film Session (root).

...

#### **H.4.2.2.2.3 Behavior**

The SCU uses the N-SET to request the SCP to update a Basic Film Box SOP Instance. The SCU shall only specify the SOP Instance UID of the last created Basic Film Box SOP Instance **in the N-SET request primitive,** and shall specify the list of Attributes for which the Attribute Values are to be set.

...

#### **H.4.2.2.3.1 Behavior**

The SCU uses the N-DELETE to request the SCP to delete the Basic Film Box SOP Instance hierarchy. The SCU shall specify **in the N-DELETE request primitive** the SOP Instance UID of the last created Basic Film Box (root).

...

#### **H.4.2.2.4.3 Behavior**

The SCU uses the N-ACTION to request the SCP to print one or more copies of a single film of the film session. The SCU shall only specify the SOP Instance UID of the last created Basic Film Box SOP Instance **in the N-ACTION request primitive.**

...

#### **H.4.4.2.1.3 Behavior**

The SCU uses the N-SET to request the SCP to update a Basic Annotation Box SOP Instance. The SCU shall only specify the SOP Instance UID of the Basic Annotation Box belonging to the last created Film Box SOP Instance **in the N-SET request primitive.** and shall specify the list of Attributes for which the Attribute Values are to be set. The SCU may erase the text string by setting a zero length value in the Attribute Text String (2030,0020).

...

#### **H.4.5.2.2.2 Behavior**

The SCU uses the N-GET to request the SCP to get a Print Job SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved.

...

#### **H.4.6.2.2.2 Behavior**

The SCU uses the N-GET to request the SCP to get a Printer SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved.

...

#### **H.4.10.2.3.2 Behavior**

The SCU uses N-DELETE to request the SCP to delete the Pull Print Request SOP Instance. The SCU shall specify the SOP Instance UID of the Pull Print Request SOP Instance **in the N-DELETE request primitive.**

...

#### **H.4.11.2.2.2 Behavior**

The SCU uses the N-GET to request the SCP to get a Printer Configuration Retrieval SOP Instance. The SCU shall specify **in the N-GET request primitive** the UID of the SOP Instance to be retrieved.

...