Kuva-aineistojen arkiston tekninen määrittely Liite 1
DICOM-validoinnin kansallisten lisätarkistuksien virhekoodit ja toipumisohjeet C-STORE:n yhteydessä

Archive of Imaging Data Technical Specification Appendix 1
DICOM C-STORE custom error codes and recovery guide

V1.22 Changes: Added error codes CFF6 (Temporary patient id is not allowed) and 0124 (Storage denied). Added link to DICOM Conformance Statement.

V1.21 Changes: CFFB (only error code description specified, no new functionality implemented: CDA study document which contains the Study Instance UID must also be archived in the Patient Data Repository before DICOM study can be archived)

V1.2 Changes: CFF9 (DICOM tag 0008,0030 StudyTime shall be given at least with an accurancy to the hour)

V1.1 Changes: CFFE (a short description of the study code is allowed in the tag 0008,1030), CFFD (modality check added: DICOM tag 0008,0061), CFF8 (a short description of the study code is allowed in the tag 0008,1030)

Service status	Further meaning	Error code	Error comment	Behavior and recovery
Error	Cannot understand	CFFF	Reserved for future use	
Error	Cannot understand	CFFE	Study description length error	Do not resend as is. Check DICOM tag 0008,1030. The study description code must conform to the Finnish codesystem 1.2.246.537.6.2.2007 Code has to exist in the codesystem and it has to be 5 characters long.The first 5 characters are validated and a short Study description is allowed after the code (e.g. 'AA1AA Head X-ray examination'). The faulty code is returned in the error comment.

Service status	Further meaning	Error code	Error comment	Behavior and recovery
Error	Cannot understand	CFFD	Mandatory parameter missing	Do not resend as is. Either, Study Date, Study Time, Study Description, Patient ID or modality is missing. The missing parameter is returned in the error comment. Make sure that DICOM tags 0008,0020 & 0008,0030 & 0008,1030 & 0010,0020 & 0008,0061 are not missing or empty.
Error	Cannot understand	CFFC	CDA document not found from Archive or it is not valid	Do not resend as is. Archive of Imaging Data has failed to find a valid (radiology) CDA document from the Patient Data Repository with the given Study Instance UID 0020,000D and Patient ID 0010,0020. Either the CDA document does not exist or the service event code (encounter id) stated in the CDA document does not point to a valid Service event (encounter) CDA document. Valid CDA documents should be archived before retry.

Service status	Further meaning	Error code	Error comment	Behavior and recovery
Error	Cannot understand	CFFB	Service event (encounter) not found	Do not resend as is. Service event (encounter) was not found from the Patient Data Repository with given parameters. Check patient id 0010,0020 and Study Instance UID 0020,000D and make sure that the service event CDA document and the CDA study document containing the Study Instance UID are archived.
Error	Cannot understand	CFFA	StudyDate error	Do not resend as is. Check DICOM tag 0008,0020. Study date format requirement: **YYYYMMDD**
Error	Cannot understand	CFF9	StudyTime error	Do not resend as is. Check DICOM tag 0008,0030. Study time format minimum requirement: **HH** More accurate timestamp is also supported: **HHMMSS.FFFFFF**

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Service status	Further meaning	Error code	Error comment	Behavior and recovery
Error	Cannot understand	CFF8	Invalid study description code	Do not resend as is. Check DICOM tag 0008,1030. The study description code must conform to the Finnish codesystem 1.2.246.537.6.2.2007 Code has to exist and be valid (not expired) in the codesystem. The first 5 characters are validated and a short Study description is allowed after the code (e.g. 'AA1AA Head X-ray examination').The faulty code is returned in the error comment.
Refused	Out of Resources	A7FF	Error in the Archive of Imaging Data (Kvarkki) system	Something has gone wrong inside the Archive of Imaging Data. Retry is recommended. If the problem persists, support should be contacted at tekninentuki[at]kanta.fi. Error details should be given to the support team such as time and date the error was noticed and other possible information about the incident (such as AE Title).
Error	Cannot understand	CFF6	Temp patient id not allowed	Do not resend. Temporary patient id is not allowed to be stored.

Service status	Further meaning	Error code	Error comment	Behavior and recovery
Refused	Not Authorized	0124	Storage denied	Technical error in validation process (Archive of Imaging Data cannot verify right to store study). Retry is recommended. If the problem persists, support should be contacted at tekninentuki[at]kanta.fi. Error details should be given to the support team such as time and date the error was noticed and other possible information about the incident (such as AE Title).

The response statuses returned in the C-STORE processing are described in the DICOM Conformance Statement:

https://dcm4chee-arc-cs.readthedocs.io/en/latest/networking/specs/storage/storage.html#id8