Tests definitions

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Test case #13476 CHXDS-I.b_DOC_CONS_RAD-69

Test Summary

Keyword :	CHXDS-I.b_DOC_CONS_RAD-69	**Type :**	conformity assessment
Name :	CHXDS-I.b_DOC_CONS_RAD-69	**Peer Type :**	NO_PEER_TEST
Version :	1.0	**Status :**	ready
Author :	aeschlimann	**Verified by :**	aeschlimann
Date of last	2019-09-11 16:57:33.098042 by r.hilary		

Short Description : This test is to verify the SUT capacity to request an image document through a RAD-69 transaction with a XDS-I document source simulator.

Test Description

Special Instructions

In this test case, we will perform a RAD-69 transaction initiated by the SUT to a simulator acting as a XDS-I Document Source.

To perform this test, you'll need the DICOM KOS (manifest1.xml, manifest2.xml, manifest3.xml) available at : https://ehealthsuisse.ihe-europe.net/test_data/XDS-I_Documents/ (right click > Save link As..)

Patient ID : **761337610411265222^^^&2.16.756.5.30.1.127.3.10.3&ISO**

Repository Unique ID : **1.1.4567332.10.8**

Endpoint [RAD-69] : **https://ehealthsuisse.ihe-europe.net:10443/xdstools7/sim/epr-testing__imaging_document_source/ids/ret.ids**

RAD-69 must be grouped with an ITI-40. Before each request you must :

1. Use the Identity Provider Simulator to do an **Authenticate User** transaction (Use the HCP aandrews)
2. Then do an **Get X-User Assertion** to the Assertion Provider Simulator (**https://ehealthsuisse.ihe-europe.net:10443/STS?wsdl**)
3. Use the SAML Assertion in your RAD-69 request
4. This part is checked in the test case XUA_X-SERVICE-USER_ITI-40. You must create a test instance of this and paste the link in the step 5.

Important : TLS is mandatory to every request in the XDS profile, as a consequence every endpoint have to use HTTPS.

Description

In order to retrieve the 3 images stored in the simulator repository, exctract the following data from each DICOM KOS :

- RetrieveLocation UID (0040,e011)

- Document UID (0008,0018)

- Transfer Syntax UID (0002,0010)

- Study Instance UID (0020,000d)

- Serie Instance UID (0020,000e)

Using the given metadata, perform the following transactions :

1. Retrieve the first image document.
2. Retrieve the second image document.
3. Retrieve the third image document.

Take note of the time at which you initiated your transaction, it'll be helpful for the next step.

- Once your requests has been executed, you'll need to recover their logs from XDSTools :

- Go to XDSTools7 homepage
- At the top of the page, set the Environment to **ehealthsuisse** and the Test Session to **epr-testing** from the drop-down lists
- At the left side of the page, click on the "**New Simulator Logs**" option (in the "**Toolkit**" section)
- Select the simulator that participated in your transaction (here it's **epr-testing__imaging_document_source**)
- In the **Message** menu, pick the logs corresponding to your transaction using your IP and transaction time
- From the **Request Body** tab, copy the Enveloppe of your request in an xml file

- Now to validate all your requests with the validation tool EVSClient :

- In EVSClient, choose on the menu **EPR > XD* Metadata > Validate**
- Upload your XML message. Then, in Model Based Validation select: **CH XDS-I.b RAD-69 Retrieve Imaging Document Set - request** to validate your request
- Copy the permanent link to your validation in the corresponding test step

For each steps, upload a proof that your system has correctly retrieved the documents.

Evaluation

The validations on EVS Client must return "**Passed**".

You must show a proof that your system received the correct documents (a screenshot).

Test Participants

Test Participants

Role in test : EPR_XDS-I.b_DOC_SOURCE_SIMU (Tool) **Option :** R **Nb of instances :** 1

Role in test : EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA **Option :** R **Nb of instances :** 1

Actor	Profile	Option
IMG_DOC_CONSUMER	XDS-I.b	NONE
SA	ATNA	NONE
DOC_CONSUMER	XDS.b	NONE
X-SERV-USR	XUA	NONE

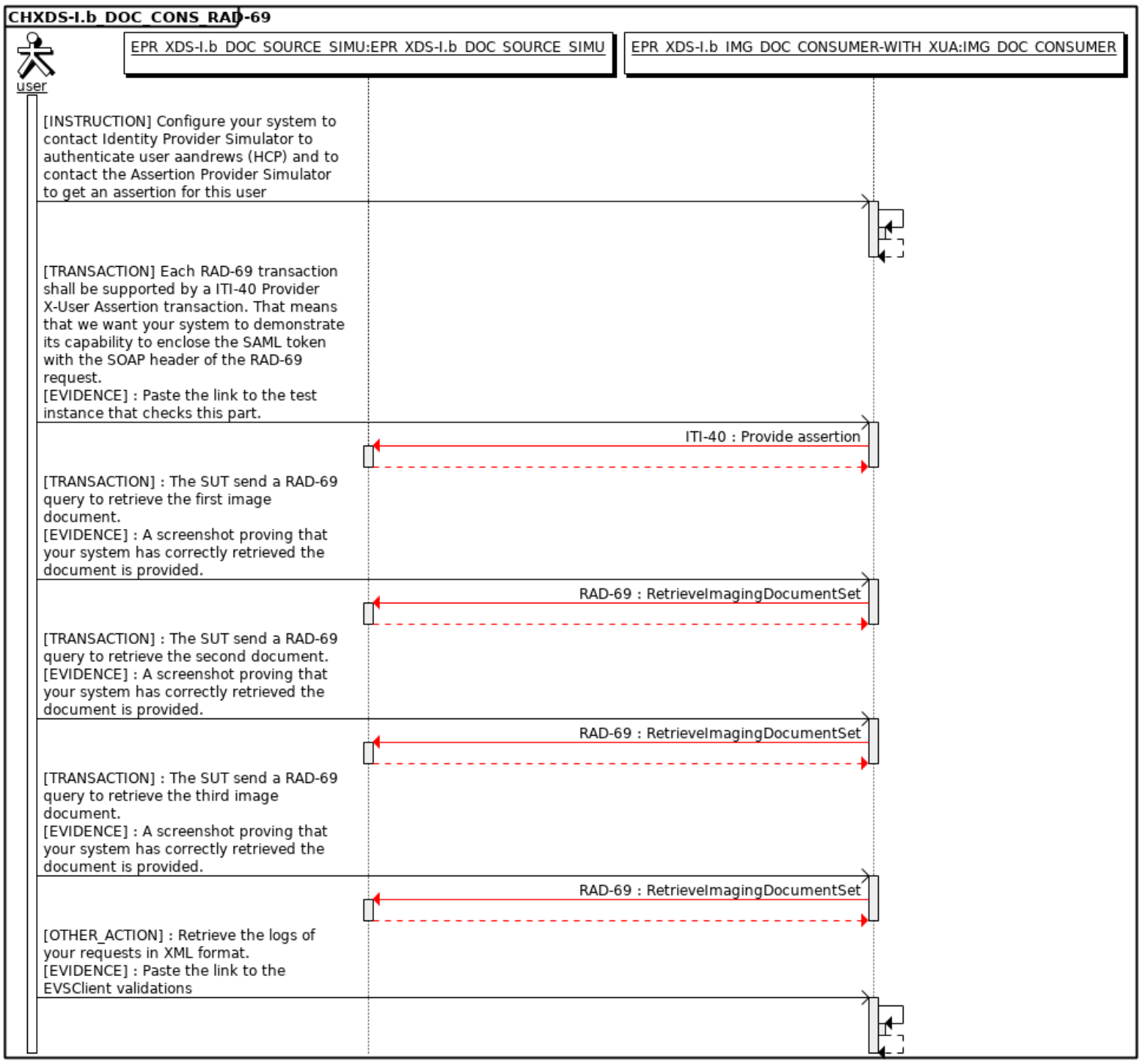
Test Steps

Index	Initiator	Responder	Transaction	Message Type	Secured ?	Option	Description
1	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA			No	Required	
[INSTRUCTION] Configure your system to contact Identity Provider Simulator to authenticate user aandrews (HCP) and to contact the Assertion Provider Simulator to get an assertion for this user							
5	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_DOC_SOURCE_SIMU	ITI-40	Provide assertion	Yes	Required	
[TRANSACTION] Each RAD-69 transaction shall be supported by a ITI-40 Provider X-User Assertion transaction. That means that we want your system to demonstrate its capability to enclose the SAML token with the SOAP header of the RAD-69 request. [EVIDENCE] : Paste the link to the test instance that checks this part.							
10	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_DOC_SOURCE_SIMU	RAD-69	RetrieveImagingDocumentSet	Yes	Required	
[TRANSACTION] : The SUT send a RAD-69 query to retrieve the first image document. [EVIDENCE] : A screenshot proving that your system has correctly retrieved the document is provided.							
20	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_DOC_SOURCE_SIMU	RAD-69	RetrieveImagingDocumentSet	Yes	Required	
[TRANSACTION] : The SUT send a RAD-69 query to retrieve the second document. [EVIDENCE] : A screenshot proving that your system has correctly retrieved the document is provided.							

Test Steps

Index	Initiator	Responder	Transaction	Message Type	Secured ?	Option	Description
30	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_DOC_SOURCE_SIMU	RAD-69	RetrieveImagingDocumentSet	Yes	Required	
[TRANSACTION] : The SUT send a RAD-69 query to retrieve the third image document. [EVIDENCE] : A screenshot proving that your system has correctly retrieved the document is provided.							
40	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA	EPR_XDS-I.b_IMG_DOC_CONSUMER-WITH_XUA		None	No	Required	
[OTHER_ACTION] : Retrieve the logs of your requests in XML format. [EVIDENCE] : Paste the link to the EVSClient validations							

Sequence Diagram



Test case #13475 CHXDS-I.b_DOC_SRC_RAD-68

Test Summary

Keyword :	CHXDS-I.b_DOC_SRC_RAD-68	**Type :**	conformity assessment
Name :	CHXDS-I.b_DOC_SRC_RAD-68	**Peer Type :**	NO_PEER_TEST
Version :	1.0	**Status :**	ready
Author :	aeschlimann	**Verified by :**	aeschlimann
Date of last	2019-09-12 18:12:31.976514 by aeschlimann		

Short Description : This test is to verify the SUT capacity to register a DICOM KOS through a RAD-68 transaction with a XDS document repository.

Test Description

h3.cjk { font-family: "Noto Sans CJK SC Regular"; }h3.ctl { font-family: "Lohit Devanagari"; }h2.cjk { font-family: "Noto Sans CJK SC Regular"; }h2.ctl { font-family: "Lohit Devanagari"; }p { margin-bottom: 0.25cm; line-height: 115%; }a:link { } Special Instructions

In this case we will test the Provide and Register Imaging Document Set (RAD-68) transaction with a simulator acting as both the Document Repository and Document Registry.

To perform this test, you'll need to download the files "image1.dcm", "image2.dcm", and "image3.dcm" from : https://ehealthsuisse.ihe-europe.net/test_data/XDS-I_Documents/

The data you'll use for the transactions are :
patient ID: **761337610411265222^^^&2.16.756.5.30.1.127.3.10.3&ISO**

Repository Unique ID : **1.1.4567332.1.70**

Requests endpoint : **https://ehealthsuisse.ihe-europe.net:10443/xdstools7/sim/epr-testing__for_doc_source_testing/rep/prb**

RAD-68 must be grouped with an ITI-40. Before each request you must :

1. Use the Identity Provider Simulator to do an **Authenticate User** transaction (Use the HCP aandrews)
2. Then do an **Get X-User Assertion** to the Assertion Provider Simulator (**https://ehealthsuisse.ihe-europe.net:10443/STS?wsdl**)
3. Use the SAML Assertion in your RAD-68 request
4. This part is checked in the test case XUA_X-SERVICE-USER_ITI-40. You must create a test instance of this and paste the link in the step 5.

Important : TLS is mandatory to every request in the XDS profile, as a consequence every endpoint have to use HTTPS.

Description

1 - Extract the KOS of each image in xml format (name each KOS by changing the .dcm extension of the image name to .xml).

The following metadata are required in the RAD-68 request to register the KOS and can be find inside of it :

- Creation Time (formed using both (0008,0012) and (0008,0013)

- Service Start Time (0008,0020)

- Service Stop Time (0008,0030)

- Type Code (0008,1032)

- Document Unique ID (0008,0018)

The rest of the metadata used for the transaction is non-important, as long as they respect the IHE and swiss XDS specifications.

2 - Using the metadata obtained, send the file "image1.xml" in a first request.

3 - Then send the two files "image2.dcm" and "image3.xml" in a second request.

Take note of the time at which you initiated your transaction, it'll be helpful for the next step.

- Once your requests has been executed, you'll need to recover their logs from XDSTools :

- Go to XDSTools7 homepage
- At the top of the page, set the Environment to **ehealthsuisse** and the Test Session to **epr-testing** from the drop-down lists
- At the left side of the page, click on the "**New Simulator Logs**" option (in the "**Toolkit**" section)
- Select the simulator that participated in your transaction (here it's **epr-testing__for_doc_source_testing**)

- In the **Message** menu, pick the logs corresponding to your transaction using your IP and transaction time
- From the **Request Body** tab, copy the Enveloppe of your request in an xml file

- Now to validate all your requests with the validation tool EVSClient :

- In EVSClient, choose on the menu **EPR > XD* Metadata > Validate**
- Upload your XML message. Then, in Model Based Validation select: **CH XDS-I.b RAD-68 PnR Imaging Document Set-b - request** to validate your request
- Copy the permanent link to your validation in the corresponding test step

For each steps, upload a proof that your system has correctly retrieved the documents.

Evaluation

The metadata used for the RAD-68 request are those found in the corresponding KOS (show both the KOS and your request to the monitor).

The validation in both EVSClient and GWT must return **Passed**.

The response of to your request must be **Success** (provide a screenshot of your system).

Test Participants

Role in test : EPR_XDS-I.b_DOC_REPOSITORY_SIMU (Tool) **Option :** R **Nb of instances :** 1

Role in test : EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA **Option :** R **Nb of instances :** 1

Actor	Profile	Option
IMG_DOC_SOURCE	XDS-I.b	NONE
X-SERV-PROV	XUA	NONE
DOC_SOURCE	XDS.b	NONE
X-SERV-USR	XUA	NONE

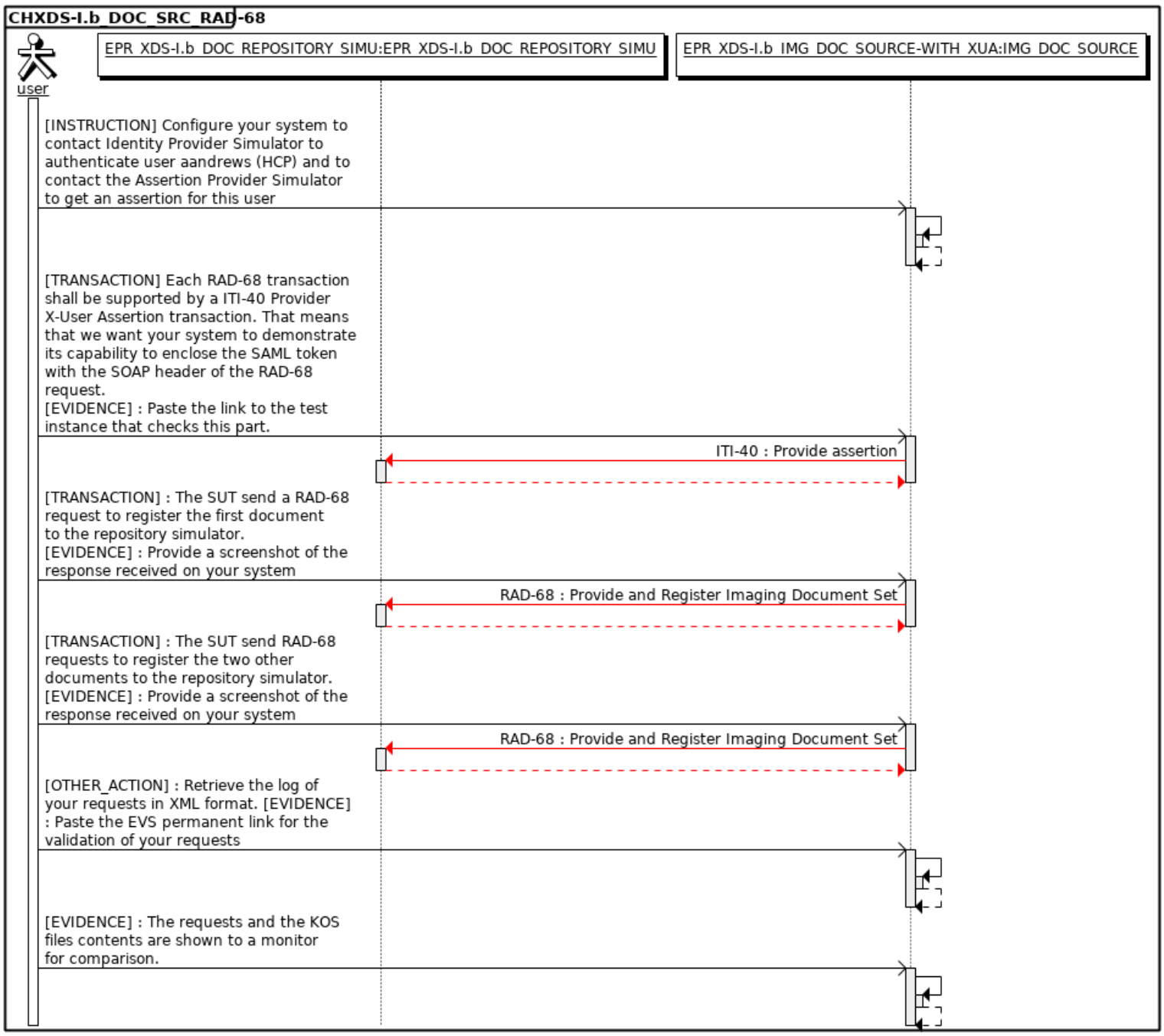
Test Steps

Index	Initiator	Responder	Transaction	Message Type	Secured ?	Option	Description
1	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA			No	Required	
[INSTRUCTION] Configure your system to contact Identity Provider Simulator to authenticate user aandrews (HCP) and to contact the Assertion Provider Simulator to get an assertion for this user							
5	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_DOC_REPOSITORY_SIMU	ITI-40	Provide assertion	Yes	Required	
[TRANSACTION] Each RAD-68 transaction shall be supported by a ITI-40 Provider X-User Assertion transaction. That means that we want your system to demonstrate its capability to enclose the SAML token with the SOAP header of the RAD-68 request. [EVIDENCE] : Paste the link to the test instance that checks this part.							
10	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_DOC_REPOSITORY_SIMU	RAD-68	Provide and Register Imaging Document Set	Yes	Required	
[TRANSACTION] : The SUT send a RAD-68 request to register the first document to the repository simulator. [EVIDENCE] : Provide a screenshot of the response received on your system							
20	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_DOC_REPOSITORY_SIMU	RAD-68	Provide and Register Imaging Document Set	Yes	Required	
[TRANSACTION] : The SUT send RAD-68 requests to register the two other documents to the repository simulator. [EVIDENCE] : Provide a screenshot of the response received on your system							

Test Steps

Index	Initiator	Responder	Transaction	Message Type	Secured ?	Option	Description
30	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA		None	No	Required	
[OTHER_ACTION] : Retrieve the log of your requests in XML format. [EVIDENCE] : Paste the EVS permanent link for the validation of your requests							
60	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA		None	No	Required	
[EVIDENCE] : The requests and the KOS files contents are shown to a monitor for comparison.							

Sequence Diagram



Test case #13477 CHXDS-I.b_DOC_SRC_RAD-69

Test Summary

Keyword :	CHXDS-I.b_DOC_SRC_RAD-69	**Type :**	conformity assessment
Name :	CHXDS-I.b_DOC_SRC_RAD-69	**Peer Type :**	NO_PEER_TEST
Version :	1.0	**Status :**	ready
Author :	aeschlimann	**Verified by :**	aberge
Date of last	2019-09-12 18:15:38.205565 by aeschlimann		

Short Description : This test is to verify the SUT capacity to provide an image document requested through a RAD-69 transaction initiated by a XDS-I Document Consumer simulator.

Test Description

Special Instructions

In this test case, we will perform a RAD-69 transaction initiated by a Document Consumer simulator to the SUT acting as a XDS-I Document Source.

To perform this test, you'll need to register on your Document Source Repository the DICOM image files (image1.dcm, image2.dcm, image3.dcm) available at : https://ehealthsuisse.ihe-europe.net/test_data/XDS-I_Documents/

Be cautious to register the files using the proper metadata, especially the following :

- Patient ID : **761337610411265222^^^&2.16.756.5.30.1.127.3.10.3&ISO**

- Document UID (0008,0018)

- Transfer Syntax UID (0002,0010)

- Study Instance UID (0020,000d)

- Serie Instance UID (0020,000e)

(you'll be able to find these in the corresponding DICOM KOS of each image file)

The Imaging Document Source actor is expected to act as a X-Service provider. This test will also be used to assess this role for RAD-69 transaction. In order to do so, you'll need to follow the instructions from this test case :

XUA_X-SERVICE-PROV_ITI-40

Important : TLS is mandatory to every request in the XDS profile, as a consequence every endpoint have to use HTTPS.

Description

Before anything, configure your system to be able to test its role as X-Service Provider, X-Service User and ADR Consumer.

The requests will be sent to your SUT from Gazelle Webservice Tester. To execute this test:

1. Access Gazelle Webservice Tester and log into the application;
2. Go to menu "Run";
3. Select the test project name **EPR XDS-I Document Source** from the drop-down list;
4. Select test suite **[RAD-69] Retrieve_Imaging_Document_Set TestSuite** by ticking the checkbox in front of its name;
5. Enter the URL of your system under test endpoint (shall be a secured endpoint)
6. Click on "Run" button
7. Wait for the script to complete its execution;
8. When the script stops, copy the permanent link of the execution to the test step in Gazelle Test Management

A **Passed** result means the documents have been properly recovered by the simulator.

The conformance of the responses sent back by your system shall be assessed. In Gazelle Webservice Tester, validate the message in EVSClient. To do so:

1. Click on the play icon next to the response type;
2. You have been redirected to EVSClient, select validator: XDS and Extension **CH** and hit the "Go" button;
3. Once the page of the validator opens, select the appropriate entry in the drop-down list and click on "Validate";
4. When the validation report shows up, a pop-up raises, click on "OK";

Evaluation

The monitor will check that you copied the link to this test instance to the corresponding test step of the test case XUA_X-SERVICE-PROV_ITI-40.

The validations on EVS Client must return **Passed.**

The status of each query must have a status "**Passed**" in GWT.

Test Participants

Role in test : EPR_XDS-I.b_DOC_CONSUMER_SIMU (Tool) **Option :** R **Nb of instances :** 1

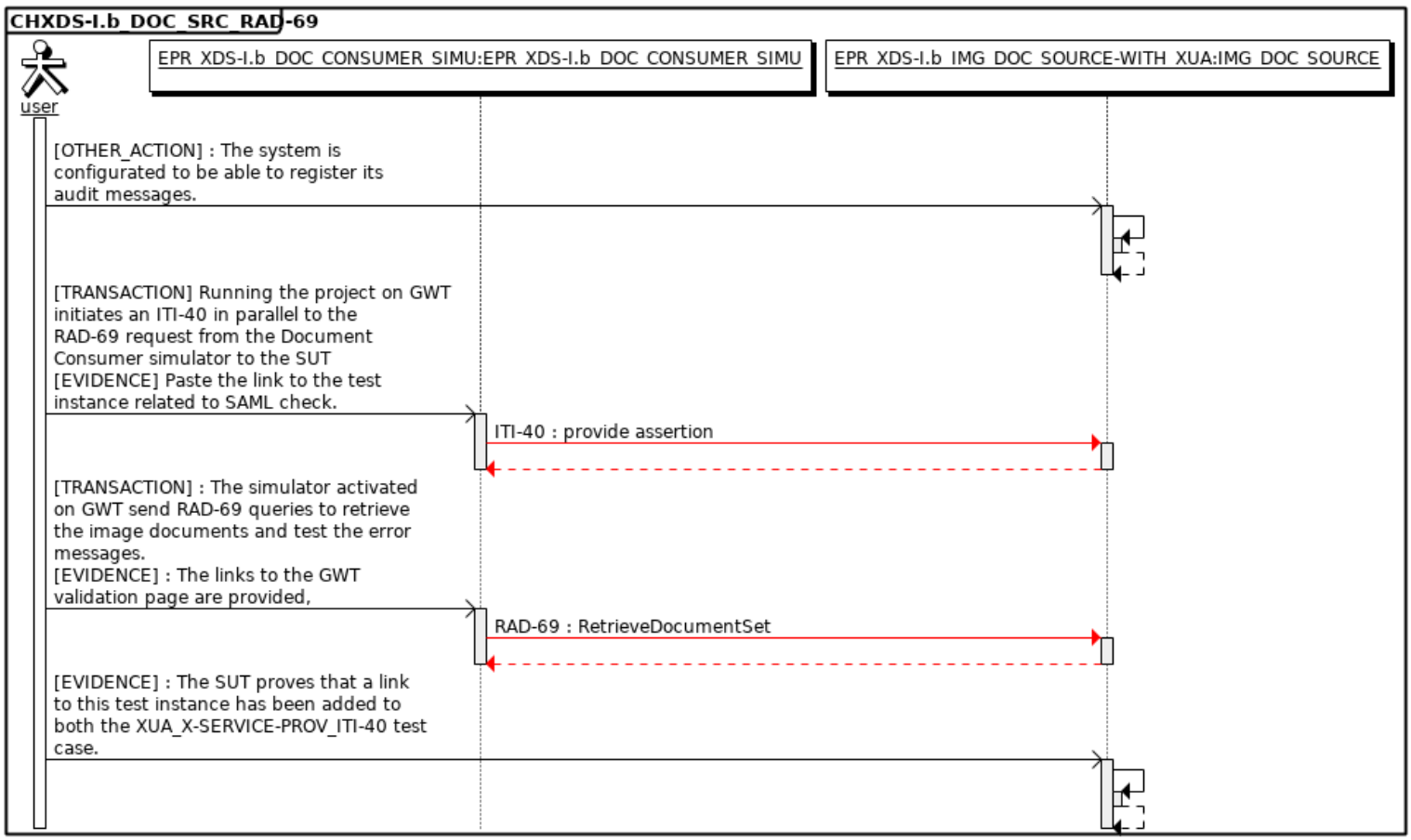
Role in test : EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA **Option :** R **Nb of instances :** 1

Actor	Profile	Option
IMG_DOC_SOURCE	XDS-I.b	NONE
X-SERV-PROV	XUA	NONE

Test Participants

Actor	Profile	Option
DOC_SOURCE	XDS.b	NONE
X-SERV-USR	XUA	NONE

Test Steps

Index	Initiator	Responder	Transaction	Message Type	Secured ?	Option	Description
1	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA		None	No	Required	
[OTHER_ACTION] : The system is configurated to be able to register its audit messages.							
9	EPR_XDS-I.b_DOC_CONSUMER_SIMU	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	ITI-40	provide assertion	Yes	Required	
[TRANSACTION] Running the project on GWT initiates an ITI-40 in parallel to the RAD-69 request from the Document Consumer simulator to the SUT [EVIDENCE] Paste the link to the test instance related to SAML check.							
10	EPR_XDS-I.b_DOC_CONSUMER_SIMU	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	RAD-69	RetrieveDocumentSet	Yes	Required	
[TRANSACTION] : The simulator activated on GWT send RAD-69 queries to retrieve the image documents and test the error messages. [EVIDENCE] : The links to the GWT validation page are provided,							
20	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA	EPR_XDS-I.b_IMG_DOC_SOURCE-WITH_XUA		None	No	Required	
[EVIDENCE] : The SUT proves that a link to this test instance has been added to both the XUA_X-SERVICE-PROV_ITI-40 test case.							

Sequence Diagram