eCR Projectathon 2016
Actors, Transactions, Options

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1 Overview

The eCR Projectathon covers 2 actors and 4 transactions:

Actor	Transaction	Optionality	Description
eCR Client	Initialize eCR	R	Request the setup of a new eCR
	Browse eCR	R	Fetch the table of content of an eCR
	Retrieve eCR Document	R	Fetch a set of documents from an eCR
	Provide eCR Document	R	Provide and register a document
eCR Provider	Initialize eCR	R	Setup a new eCR and its permissions
	Browse eCR	R	Provide the table of contents of an eCR
	Forward eCR Query	O	Integrate further peers into a query
	Retrieve eCR Document	R	Provide a requested set of documents
	Provide eCR Document	R	Accepts and register a document

Vendors may apply for a conformance statement to either of these actors.

The following options may additionally be implemented

Actor	Option	Reference
eCR Provider	Peer-to-Peer Networking of eCR Providers	4.1
eCR Client	Digital Consent	4.2
eCR Provider	Digital Consent	4.2

2 Actors

2.1 eCR Client

eCR client actor is a grouping of the actors IHE Document Consumer, IHE Document Source, and IHE X-Service User.

2.2 eCR Provider

eCR provider is a grouping of the actors IHE Document Registry, IHE Document Repository, and IHE X-Service Provider. eCR Provider actor shall be deployed as a secure node.

The option Peer-to-Peer Networking of eCR Providers (see section 4.1) requires further groupings with IHE Initiating Gateway, Responding Gateway, Document Source, and Document Recipient.

3   eCR Transactions

3.1   Initialize eCR

This eCR transaction is a constrained implementation of IHE ITI-41. The constraints to be implemented are defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_ResourceManager#EFA_XDS.2FXDR_Binding:_createECR

Each request shall be piggybacked with an ITI-40 transaction. The provided SAML identity assertion shall follow the constraints as defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_Identity_Assertion_SAML2_Binding

The eCR Provider actor shall write an audit trail entry according. eCR defined extensions to IHE ITI-20 and IHE ITI-41 audit trail definitions are specified at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_Audit_Trail_Binding.

3.2   Provide eCR Document

This eCR transaction is a constrained implementation of IHE ITI-41. The constraints to be implemented are defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_DocumentRepository#EFA_XDS_Binding:_provideData.

Each request shall be piggybacked with an ITI-40 transaction. The provided SAML identity assertion shall follow the constraints as defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_Identity_Assertion_SAML2_Binding

The eCR Provider actor shall write an audit trail entry according. eCR defined extensions to IHE ITI-20 and IHE ITI-41 audit trail definitions are specified at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_Audit_Trail_Binding.

3.3   Browse eCR

This eCR transaction is a sequence of IHE ITI-18 queries:

- Find Folders,
- GetFolderAndContents, and
- GetAssociations.

The constraints to be implemented are defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_ResourceManager#EFA_XDS_Binding:_listPartitions
and
http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_DocumentRegistry#EFA_XDS_Binding:_listPartitionContent.

Each request shall be piggybacked with an ITI-40 transaction. The provided SAML identity assertion shall follow the constraints as defined at

http://wiki.hl7.de/index.php?title=cdaefa:EFA_Identity_Assertion_SAML2_Binding

The eCR Provider actor shall write an audit trail entry according. eCR defined extensions to IHE ITI-20 and IHE ITI-18 audit trail definitions are specified at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_Audit_Trail_Binding.

3.4   Retrieve eCR Document

This eCR transaction is a constrained implementation of IHE ITI-43. The constraints to be implemented are defined at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_DocumentRepository#EFA_XDS_Binding:_retrieveData.

Each request shall be piggybacked with an ITI-40 transaction. The provided SAML identity assertion shall follow the constraints as defined at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_Identity_Assertion_SAML2_Binding

The eCR Provider actor shall write an audit trail entry according. eCR defined extensions to IHE ITI-20 and IHE ITI-43 audit trail definitions are specified at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_Audit_Trail_Binding.

3.5   Forward eCR Query

This transactions is part of the option "Peer-to-Peer Networking of eCR Providers".

This eCR transaction is a constrained implementation of the IHE transactions ITI-38 and ITI-39. The contraints are defined at

- http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_DocumentRepository#EFA_XDS_Binding:_retrieveData
- http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_ResourceManager#EFA_XDS_Binding:_listPartitions
- http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_DocumentRegistry#EFA_XDS_Binding:_listPartitionContent.

Each request shall be piggybacked with an ITI-40 transaction. The provided SAML identity assertion shall follow the constraints as defined at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_Identity_Assertion_SAML2_Binding

The eCR Provider actor shall write an audit trail entry according. eCR defined extensions to IHE ITI-20 and IHE ITI-43 audit trail definitions are specified at
http://wiki.hl7.de/index.php?title=cdaefa:EFA_Audit_Trail_Binding.

4   Options

4.1   Peer-to-Peer Networking of eCR Providers

Vendors of eCR provider actors may choose to implement the eCR P2P-Option which allows for distributing data of a single eCR instance among multiple communities.

This option requires three additional functionalities to be implemented by the provider actor only:

1. If an existing eCR is registered at an outside eCR provider, this eCR provider shall query the list of participating eCR providers (specific data object, called "ecR Mount Point") at the primary domain. This is performed using a profile on ITI-38: http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_ResourceManager#EFA_IHE-ITI-Binding:_listRecordLocations

2. If data to an existing eCR is to be registered within a second domain, the provider at the 2nd domain must provide and register a respective link at the primary domain. This is performed using a profile on ITI-41: http://wiki.hl7.de/index.php?title=cdaefa:EFA_XDS_ResourceManager#EFA_IHE-ITI-Binding:_registerRecordLocation

3. Incoming transactions of type ITI-18 and ITI-43 are forwarded to all domains that hold further data for the identified eCR. See Section 3.5 Forward eCR Query.

4.2   Digital Consent

Various German stakeholders jointly developed a specification for a digital consent document that may be used for transmitting consent information for authorizing named parties to use an electronic health record. This specification is an extension to the German "IHE Cookbook". The CDA implementation guideline can be found at: http://wiki.hl7.de/images/EPPC-G_Draft_for_Comment_v04.pdf

For the projectathon, vendors implementing eCR client and provider actors may choose to implement the "eCR Digital Consent" option. In this case the CDA document registered and provided during eCR setup must comply to the CDA implementation Guide and attribute mapping tables as defined in http://wiki.hl7.de/images/EPPC-G_Draft_for_Comment_v04.pdf.