

XCA Test Environment

- 3 DIFFERENT COMMUNITIES (Red, Green, Blue).
- Could be an XDS Affinity Domain, or not.
- 3 DIFFERENT Patient ID ASSIGNING AUTHORITIES (Red, Green, Blue)

RED Ass. Authority/Aff. Domain

NIST XDS Toolkit
CONSUMER

PatientID:
IHERED-1039^^^&1.3.6.
1.4.1.21367.13.20.1000
&ISO

VENDOR "A"
INITIATING GATEWAY

PIX/PDQ/XCPD/etc.

PatientIDs used:

IHERED-1039^^^&1.3.6.1.4.1.21367.13.20.1000&ISO
IHEBLUE-1039^^^&1.3.6.1.4.1.21367.13.20.2000&ISO
IHEGREEN-1039^^^&1.3.6.1.4.1.21367.13.20.3000&ISO
0

BLUE Ass. Authority/Aff. Domain

VENDOR "B"
RESPONDING
GATEWAY

PatientID:
IHEBLUE-1039^^^&1.3
.6.1.4.1.
21367.13.20.3000&ISO

BLUE
REGISTRY

REPOSITORY

NIST XDS
Toolkit
SOURCE

GREEN Ass. Authority/Aff. Domain

VENDOR "C"
RESPONDING
GATEWAY

PatientID:
IHEGREEN-1039^^^&1.3
.6.1.4.1.21367.2000&ISO

GREEN
REGISTRY

REPOSITORY

NIST XDS
Toolkit
SOURCE

- Support for XCA Testing in XDS toolkit:

- 3 different patient ID assigning authorities (Red, Green, Blue)
- XDS Toolkit has an XDS Document Consumer and XDS Document Source to assist with test setup and execution
 - XDS Toolkit Doc Source can submit a document belonging to the test patient to a Repository in the Responding community
 - XDS Toolkit Doc Consumer can send query and retrieve requests in the Initiating Community if the Initiating Gateway can respond to ITI-41 and ITI-43 transactions
- (future) 3 different affinity domains with 3 different “coding systems” (Red, Green, Blue): 3 copies of NIST Registry/Repository

- Vendors: each XCA Gateway is assigned to a precise color affinity patient identification domain. He must set up only 1 assigning authority and only 1 Affinity Domain set of codes.

XCA TESTING OVERVIEW

A. XCA PRELIMINARY SETTINGS

- **Responding Gateway Setup:** correct setting of homeCommunityId and of the XDS rRegistry/Repository pair behind the Responding Gateway.

B. XCA QUERY:

- **X-GW Query Request – findDocuments** – from Initiating Gateway to Responding Gateway contains the patientID valid in the responding community (with the color of the responding community);

- **X-GW Query Response – findDocuments** – is consolidated at the Initiating Gateway and arrives at the Document Consumer with the list of the documents uuids and contains the related homeCommunityIDs. (so, the Responding Gateway puts the homecommunityId in the response)

- **X-GW Query Request – getDocuments** – uses the same document uuid contained in the findDocuments response and is addressed to the right homeCommunityID.

- **X-GW Query Response – getDocuments** – in the metadata of the response is present the patientID valid in the responding community; this response contains documentUniqueld, repositoryUniqueld and homeCommunityid that will be used in the retrieve.

C. XCA RETRIEVE:

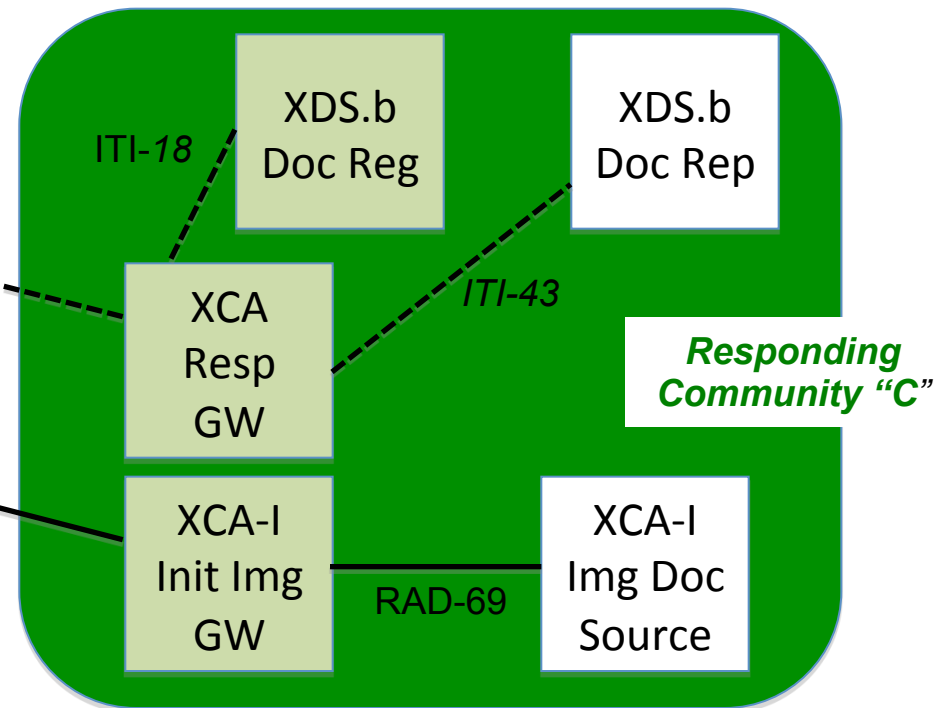
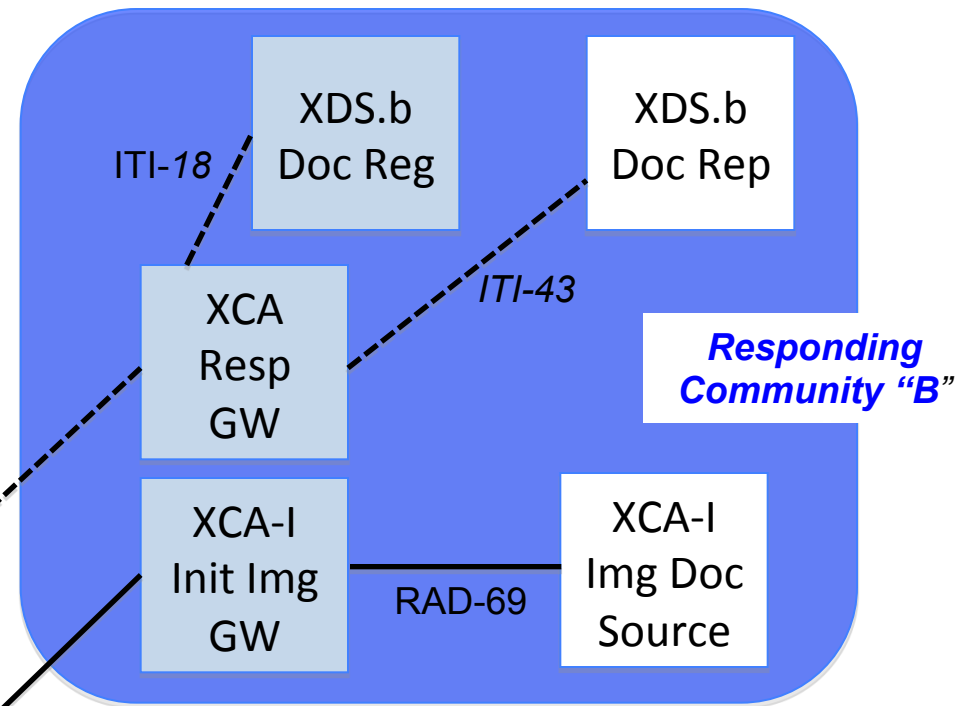
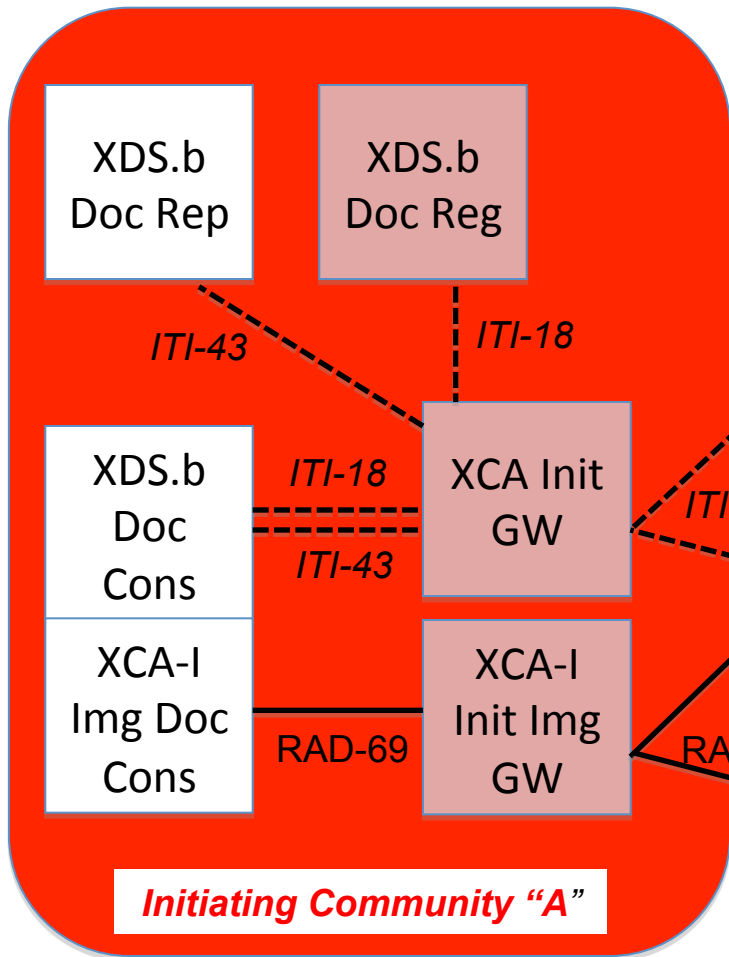
-**X-GW Retrieve – request** – uses the same document uniqueld, repository Uniqueld and homeCommunityID contained in the getDocuments response.

D. OTHER ISSUES

- Every transactions is to be made over TLS

- ATNA logging to any Audit Record Repository

XCA-I expands the XCA Test Environment



- - - - - XDS.b or XCA transaction
 _____ XDS-I.b or XCA-I transaction