2020-09 Order Catalog

Track overview

Short Description

Sharable catalogs of healthcare products or services help streamline the processes of care. This track will focus on testing interactions with catalogs of clinical laboratory services, as framed by the Order Catalog FHIR Implementation Guide currently under ballot.

Long Description

This track is the continuation of the same track that was run during connectathon #24, testing the changes brought to the IG as the outcome of the former connectathon. It will test interactions between consumers, custodian and owner of a laboratory compendium.

Track objectives include:

- testing the new representation of specimen requirements attached to a laboratory service, in all kind of interactions.
- testing the manipulation of super-panels nesting other panels.
- testing the administration of a catalog in transaction mode.

Type

- Test an Implementation Guide

Submitting Work Group/Project/Accelerator/Affiliate/Implementer Group

Orders and Observations

Proposed Track Lead

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Related tracks

none.

FHIR Version

- FHIR R4

Specification(s) this track uses

This track is based on the Order Catalog FHIR Implementation Guide currently under ballot.

Artifacts of focus

- http://hl7.org/fhir/plandefinition.html
- http://hl7.org/fhir/activitydefinition.html
- http://hl7.org/fhir/specimendefinition.html
- http://hl7.org/fhir/observationdefinition.html

Clinical input requested (if any)

none
Patient input requested (if any)

none

Expected participants

At least these two organizations:

- Quest Diagnostics in the roles of catalog owner and catalog consumer
- Phast in the role of catalog custodian - See the catalog server coordinates on conman.

Zulip stream

https://chat.fhir.org/#narrow/stream/179221-catalogs

Track Orientation

The track orientation held during connectathon #24 still applies to this connectathon #25 for this track.

Get the recording: password is Bu%k%1AU

Track details

System Roles

Role 1 - Catalog custodian
A FHIR server hosting one or more catalogs of laboratory diagnostic services, responding to catalog consumers as well as to catalog owners.

Role 2 - Catalog consumer
A catalog FHIR client. The system shall be capable of browsing the lab catalog content, and retrieving the definitions of laboratory services from it.

Role 3 - Catalog owner
A system owning the content of the catalog, and delegating its FHIR publication to a Catalog custodian. Such a system is a FHIR client capable of administering the content of a catalog.

Scenarios

Scenario 1: Browse catalog content
System roles: Catalog consumer > Catalog custodian
Action: Search for laboratory services in the catalog, using the search criteria specified in the order-catalog FHIR IG.

Scenario 2: Retrieve the full details of a laboratory service definition
System roles: Catalog consumer > Catalog custodian
Action: apply step 2 as specified here in the order-catalog FHIR IG.

Scenario 3: Import a subset of a catalog
System roles: Catalog consumer > Catalog custodian
Action: Import interaction described in this section of the guide

Scenario 4: Transaction create or update in a catalog
System roles: Catalog owner > Catalog custodian
Action: using a transaction Bundle, create/update the graph of resources representing the full description of a laboratory service in the catalog

Scenario 5: Atomic create, update, delete in a catalog
System roles: Catalog owner > Catalog custodian

Action: Atomic interactions (create, update, patch, delete) on resources of a catalog, with integrity control maintained by the custodian.

TestScript(s)

none.

Security and Privacy Considerations

No personal data is involved on this track. The base level of security proposed is: http basic authentication + TLS 1.0

Track Report Out

Summary

The track tested the Order Catalog IG as it is in the current ballot: restricted to the laboratory diagnostic service content. The track aimed at testing the most recent features added last June to this IG:

1) Handling complex combinations of specimen requirements;
2) Administering and consuming laboratory super-panels with nested panels.

Three roles were involved: Catalog consumer (client), Catalog owner (client) and Catalog custodian (server).

Participants

- Quest Diagnostics: Freida Hall, Falguni Patel, Gary Randman
- PHAST: François Macary
- Philips: Ana Kostadinovska (Observer)

Systems

- STS Terminology & catalog server (PHAST) - role of Catalog custodian
- REST-based client (Quest) - roles of Catalog custodian and Catalog consumer

Notable achievements

- Administration of super panels including reflexes, in transaction mode (Catalog owner ? Catalog custodian)
- Management of related documents in a PlanDefinition, especially input documents needed with the order of a particular test or panel.
- Panels including Ask at Order Entry observations.
- Specimen requirements management in PlanDefinition prove more reliable than the previous solution based on ActivityDefinition.

Discovered issues

These gaps in the current IG were identified and turned into Jira trackers:

- #28481 - Enhancement: add an optional result interpretation guidance summary to the definition of panels & tests.
- #28485 - Clarification: Provide guidance on how the catalog owner should conduct deletions of items or sub-items of the catalog.
- #28488 - Clarification: Provide guidance on how the importer of the subset of a catalog should handle the link between its local uri and the uri from the source catalog.
- #28493 - Clarification: Representation of reflex tests in a laboratory panel or test.

Now what?

- The Order Catalog FHIR IG needs to reach out to EHR and EMR vendors, which are the typical consumers of a catalog.
- Migrate the IG to R5.
- This IG will consolidate its spec for the other kinds of catalogs, as planned: Catalogs of medical devices, catalogs of medications.