RDF - FHIR/RDF

The RDF for Semantic Interoperability group (or RDF group) is a sub-group of the HL7 ITS work group and a joint collaboration with the W3C Healthcare and Life Sciences group on Clinical Observations Interoperability to facilitate the use of RDF as a common semantic foundation for healthcare information interoperability. The main focus is currently on FHIR/RDF – the standard RDF (Turtle) format for FHIR data.

Anyone may join this group simply by participating in the work, which is conducted mainly on the public HL7 and W3C mailing lists listed below and on a weekly teleconference. You are encouraged to become an HL7 member, but not required unless you wish to take a leadership role in an HL7 group, such as becoming a co-chair. You are also encouraged to have your organization become a W3C member, but not required. See benefits of W3C membership.

Related resources

- Mailing lists (please join at least one and cross post to both):
  - HL7 ITS work group mailing list - Subscribe
  - W3C HCLS mailing list - Subscribe
- FHIR RDF issues list
- http://build.fhir.org/rdf.html
- Tutorials:
  - Tutorial: FHIR RDF as a Bridge to the Semantic Web in Healthcare

Weekly Teleconference – Add to Calendar

- Thursdays 11am-12pm (Boston timezone – see timezone converter)
- Zoom teleconference URL: https://tinyurl.com/fhirrdfzoom
- W3C IRC -- channel #hcls – for taking minutes during the teleconference - See help page

Agenda - Thursday Oct 6, 2022 (Sep 29 is canceled due to US2TS)

Chair: David Booth <david@dbooth.org>

1. Timeline for Updating the FHIR spec for R5 RDF changes:
   a. FHIR ontology -- Deepak?
      i. And Add ontology property relationships to underscore properties: value ? _value
   b. ShEx -- Deepak
   c. Examples -- Jim
   d. Resource templates -- Jim
   e. HAPI parser/generator -- EricP
   f. Extensions page
   g. Script to convert R5 RDF to OWL-and-SPARQL-friendly RDF

2. TODO 1: Mark the FHIR Ontology draft on W3C github document as obsolete and point it to the generated FHIR RDF vocabulary/ontology? – DBooth

3. Issue 94: Concept URIs -- (Leader: Gaurav)
4. Issue 98: FHIR RDF playground
5. Other issues

Future Agenda

1. FHIR RDF issues that Harold Solbrig found
2. FHIR.JSON pre-processing needed for converting FHIR JSON to FHIR RDF using JSON-LD 1.1
3. (After Harold’s retirement, per Harold 8/16/21) schema.org alignment with FHIR/RDF – also healthcare.schema.org
4. ShExMap demo

Minutes

- Sep 22, 2022 – R5 updates
- Sep 15, 2022 – R5 updates
- Sep 08, 2022 – R5 updates
- Sep 01, 2022 – R5 updates, I18N
- Aug 25, 2022 – R5 updates, Concept IRIs #94
- Aug 18, 2022 – Concept IRIs #94
- Aug 17, 2022 – ITS group meeting with RDF subgroup
- Aug 16, 2022 – Issues 76, 106, 93
- Aug 11, 2022 – Issues 104, 94, 76, 93
- Aug 09, 2022 – Issues 76, 93
- Aug 04, 2022 – Issues 76, 93, 104
- Aug 02, 2022 – Issues 93, 104
- Jul 28, 2022 – Issues 102, 93, 69, 104, 76, 95
- Jul 21, 2022 – RDF Lists; Concept IRIs; #102 Concepts with both scalar and object range
- Jul 14, 2022 -- Issue 94 (Concept IRIs); Issue 95 (References lack a type arc)
- Jul 07, 2022 – Issue 94 (Concept IRIs)
- Jun 30, 2022 – Issue 94 (Concept IRIs); Issue 95 (FHIR references); Issue 102 (Properties with both scalar and object range)
• Jun 23, 2022 – Issue 94 (Concept IRIs); review of R5 issues list
• Jun 16, 2022 – Issue 94 (Concept IRIs); Issue 95 (References lack a type arc)
• Jun 09, 2022 – Issue 94 (concept IRIs)
• Jun 02, 2022 – FHIR RDF Playground
• May 26, 2022 – Issue 94 (concept IRIs); RDF lists
• May 19, 2022 – Issue 94 (concept IRIs); RDF lists; FHIR RDF Playground
• May 12, 2020 – Issue 94 (concept URIs); RDF lists; FHIR RDF Playground
• May 10, 2022 – Update on FHIR RDF progress; approval of minutes
• -------------------------- Minutes below this line were approved on 10-May-2022 --------------------------
• May 05, 2022 – Issue 94 (concept URIs); RDF lists; FHIR RDF Playground
• Apr 29, 2022 – Issue 94 (concept URIs); RDF lists; FHIR RDF Playground; Upcoming HL7 Meeting
• Apr 21, 2022 – Issue 94 (concept URIs); RDF lists; FHIR RDF Playground
• Apr 14, 2022 – Issue 94 (concept URIs); RDF lists
• Apr 07, 2022 – Issue 94 (concept URIs)
• Mar 31, 2022 – Issue 94 (concept URIs); RDF lists
• Mar 24, 2022 – CANCELED
• Mar 17, 2022 – Issue 94 (concept URIs); RDF lists
• Mar 10, 2022 – Issue 94 (concept URIs); RDF lists
• Mar 03, 2022 – Issue 94 (concept URIs); RDF lists
• Feb 24, 2022 – Issue 94 (concept URIs); FHIR alignment with Semantic Web; RDF lists
• Feb 17, 2022 – Issue 94 (concept URIs); RDF lists and OWL; FHIR RDF Playground
• Feb 10, 2022 – Issue 94 (concept URIs); RDF lists and OWL; FHIR RDF Playground; FHIR RDF knowledge graph
• Feb 03, 2022 – Issue 94 (concept URIs); RDF lists and OWL; ShEx for FHIR RDF; FHIR RDF knowledge graph; EBMonFHIR and COKA
• Jan 27, 2022 – Issue 94 (concept URIs), JSON preprocessing
• Jan 20, 2022 – Approval of minutes: FHIR JSON-LD Playground; RDF Lists and OWL; Converting FHIR JSON to FHIR RDF
• -------------------------- Minutes below this line were approved on 20-Jan-2022 --------------------------
• Jan 13, 2022 – Issue 94 (concept URIs), FHIR JSON-LD Playground, Turtle serialization
• Jan 06, 2022 – Status updates, Valuesets and Codesystems, Turtle pretty printing
• Dec 23, 2021 – Introductions, Issue 94, Semantics of FHIR structure definitions, Personal Knowledge Graph
• Dec 16, 2021 – Issue 76, FHIR JSON-LD library, FHIR JSON-LD playground, semantics of FHIR structure definitions
• Dec 09, 2021 – Introductions; Issues 76, 94; and FHIR JSON-LD playground
• Dec 02, 2021 – Issues 76, 94; and FHIR JSON-LD playground
• Nov 18, 2021 – Examples of multiple proposed R5 changes
• Nov 11, 2021 – Issues 76, 77
• Nov 4, 2021 – Issues 94, 95
• Oct 28, 2021 – Issues 77, 93, 76, 69
• Oct 21, 2021 – Issues 76, 69
• Oct 14, 2021 – Issues 93, 92, 78
• Oct 07, 2021 – Issues 94, 69, 92 and 77
• Sep 30, 2021 – Issues 77, 93 and 69
• Sep 23, 2021 – Review of HL7 WG meeting; Issue 77
• Sep 21, 2021 – FHIR RDF Update at HL7 Working Group Meeting
• -------------------------- Minutes below this line were approved on 21-Sep-2021 --------------------------
• Sep 16, 2021 – Issue 77: Simplifying primitive properties while still supporting FHIR extensions (cont)
• Sep 09, 2021 – Issue 77: Simplifying primitive properties while still supporting FHIR extensions (cont)
• Sep 02, 2021 – Issue 77: Simplifying primitive properties while still supporting FHIR extensions (cont)
• Aug 26, 2021 – Issue 77: Simplifying primitive properties while still supporting FHIR extensions (cont)
• Aug 19, 2021 – Issue 77: Simplifying primitive properties while still supporting FHIR extensions
• Aug 12, 2021 – Brad Simons (SureScripts) describes the FHIR RDF they developed
• Aug 5, 2021 – Harold Solbrig describes JSON-LD 1.1 conversion of FHIR JSON to RDF
• July 22, 2021 – Emily Pfaff's slides in PowerPoint or PDF
• July 15, 2021 - Introductions, goals and status

Archive

In 2020 HL7 migrated from MediaWiki to Confluence.

• RDF subgroup archive on the old Wiki
• Older meeting Minutes