

Global Registries Initiative Meeting Report - Tucson April 6 & 7, 2010

Attendees

Jeremy Frumkin, University of Arizona (Host, Ockham)
Terry Reese, Oregon State University (Ockham)
Monica Berko, ANDS
Tim DiLauro, Johns Hopkins (Data Conservancy)
Bryan Heidorn, University of Arizona (SIRLS) (Day 1)

Absent

Vic Lyte, Mimas (IESR)

Other details and notes from the meeting:

<http://gri-arizona.blogspot.com/2010/04/global-registries-initiative-meeting.html>

Meeting Report

The Global Registries Initiative (GRI) held its face-to-face meeting in Tucson, Arizona on April 6 & 7, 2010. The initial agenda and anticipated outcomes of the meeting were as follows:

Tuesday, April 6:

9 am - 9:15: Housekeeping, overview of agenda
9:15 - 10:30: Review of use cases
10:30 - 10:45: Break
10:45 - 12:00: Continued review of use cases, discussion of requirements and problem statement
12:00 - 2:00: Lunch
2:00 - 3:15: Functional Requirements, high-level architecture and information model
3:15 - 3:30: Break
3:30 - 4:45: review action items from Canberra meeting, review outcomes of day 1, review agenda for day 2
6:30 - : Dinner

Wednesday, April 7

Agenda developed based on outcomes of day 1

Major outputs needed from day 2:

- * 1-pager (brochure) regarding GRI
- * Outline of overview paper
- * Draft of high-level architecture and information model
- * Next steps (post-meeting)

The meeting began with an attempt to review use cases that were previously submitted (see the GRI Wiki and website). The goal of reviewing the use cases was to step back and pull out the problem or set of problems that a GRN would address - i.e. while each of the registry efforts currently active in the GRI were the result of a problem or need within their own communities, we hoped during the meeting to identify the commonality from these efforts, along with other needs described in the use cases, and build a strong and valid problem statement.

Global Registries Initiative Meeting Report - Tucson
 April 6 & 7, 2010

To this effect, we looked at the use scenario brought forward by Tim DiLauro of the Data Conservancy project, out of the National Science Foundation's DataNet program. Tim provided a current overview of the Conservancy's architecture (Fig. 1)

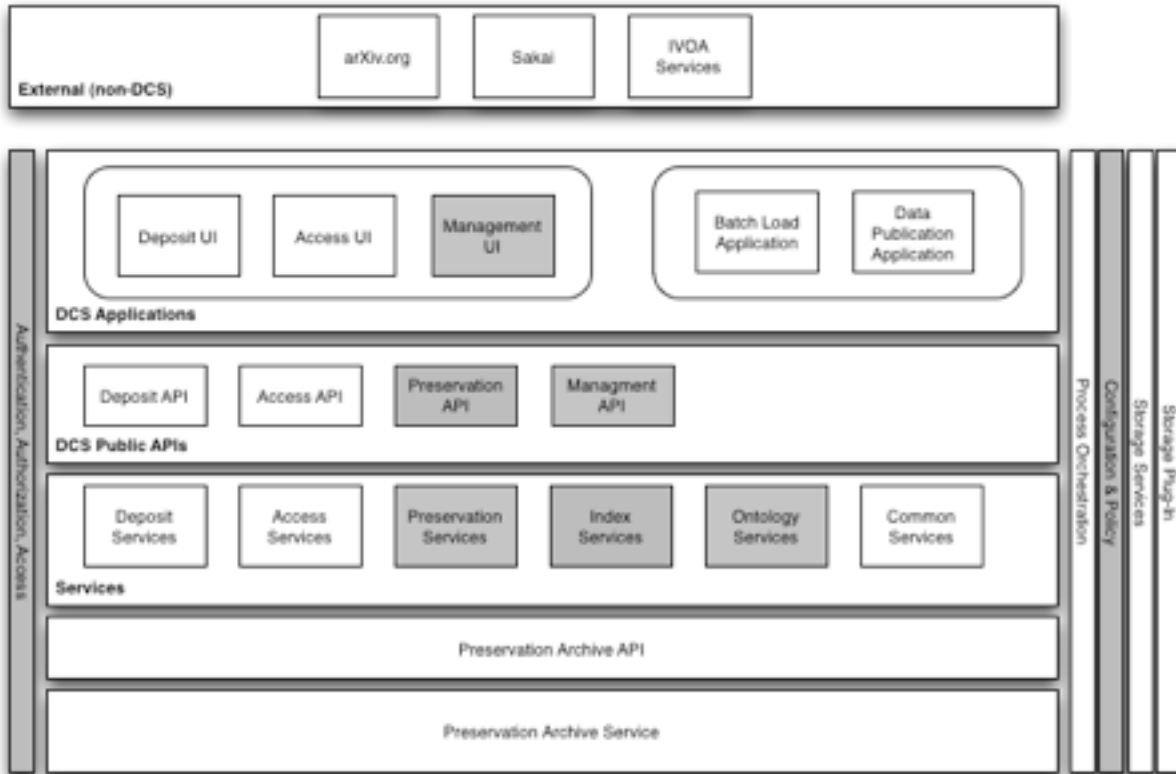


Fig. 1 - Data Conservancy System Architecture (as of April 7, 2010)

Additionally, Tim diagrammed a high-level view of the Data Conservancy System (DCS) interacting with the GRN (Fig. 2):

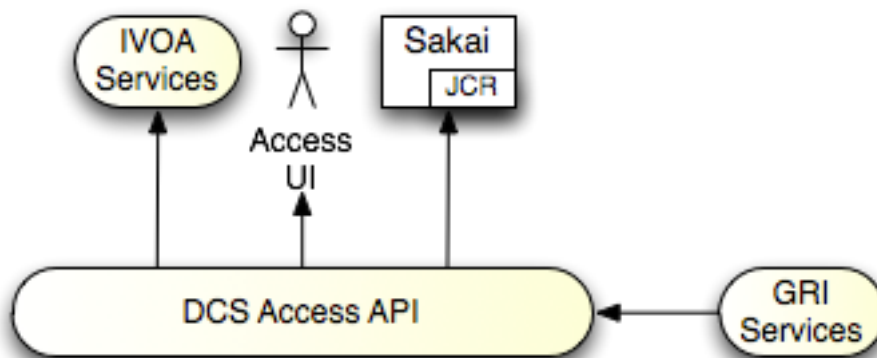


Fig. 2 - High-level view of DCS / GRN interaction

Global Registries Initiative Meeting Report - Tucson
 April 6 & 7, 2010

To augment the high-level view, Tim also provided a UML diagram that describes one possible workflow involving the DCS interacting with the GRN (Fig. 3):

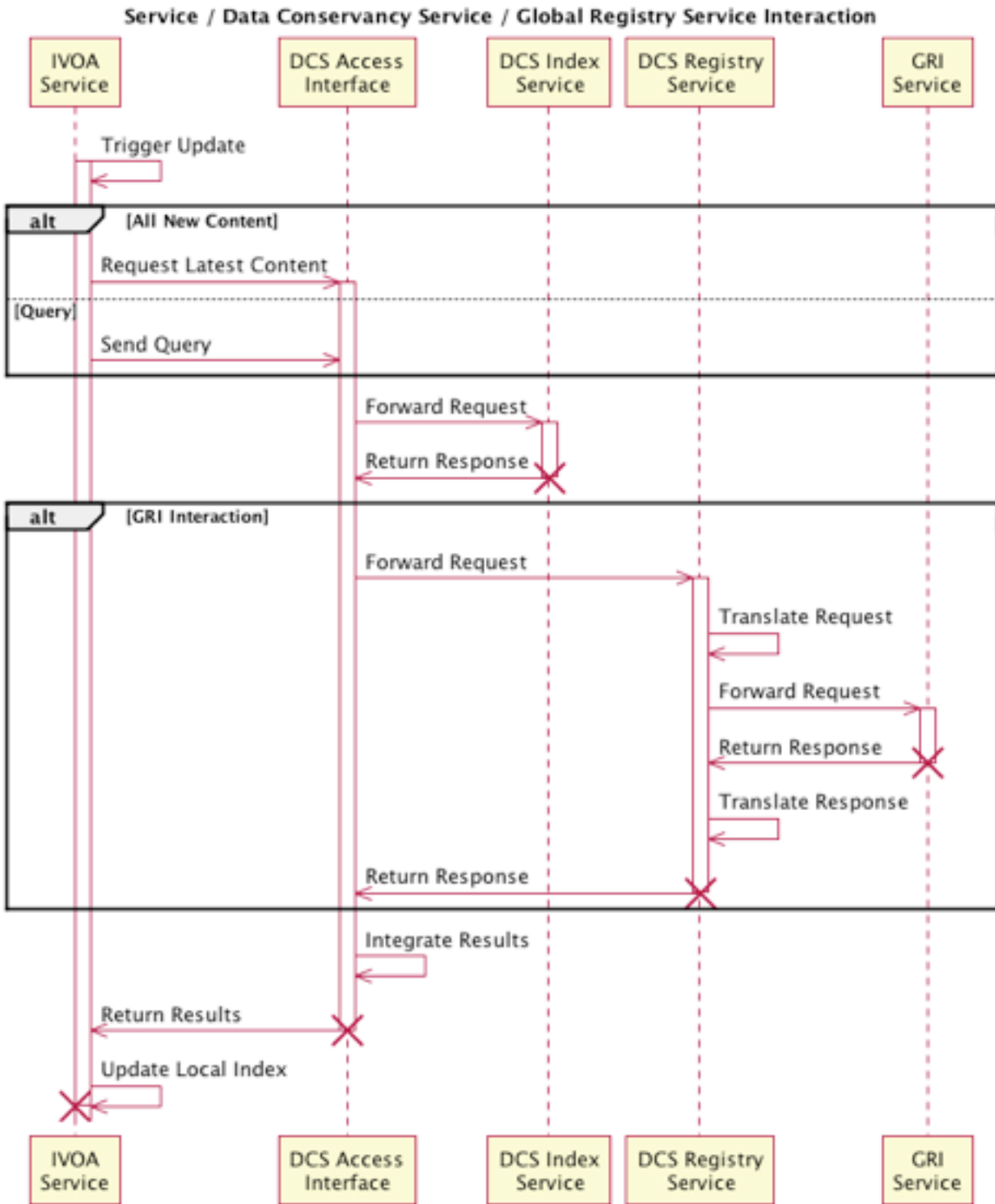


Fig. 3 - UML Diagram of DCS / GRN interaction

Global Registries Initiative Meeting Report - Tucson
April 6 & 7, 2010

Based on the discussion around the DCI's scenario, the group decided to focus on two system areas that required attention: the overall data model behind a GRN, as well as the functional calls (i.e. API) for the interchange of data and functions within a GRN. In exploring the data model, there was discussion around the data models currently deployed by ANDS, Ockham, and IESR. Two main contenders for the basis of the data model were identified - the current IESR data model, and ISO 2146 (Note: the group had available a late draft of the most recent version of ISO 2146, but needs to verify that it is similar to the final version of the spec).

Also discussed was the need to adjust any common "registry" data model to meet the needs of a union of registry collections - in essence, an additional record type of "registry" would need to be supported in a GRN data model. This requirement was the result of a discussion of the scenario where a registry provider did not contribute its records directly into a centralized portal, but where a service that utilized the GRN would through the use of a registry record in a centralized portal navigate to a secondary registry and then re-query for a particular purpose there (similar to a query propagation in DNS). This particular requirement also brought out the point that it would be useful to have a standard API that could be utilized not only for a Global Registry Service core portal, but for any participating registry in the GRN. A basic diagram of the framework showing an application's interaction with the GRN and propagating its actions to a participating registry can be seen in Figure 4.

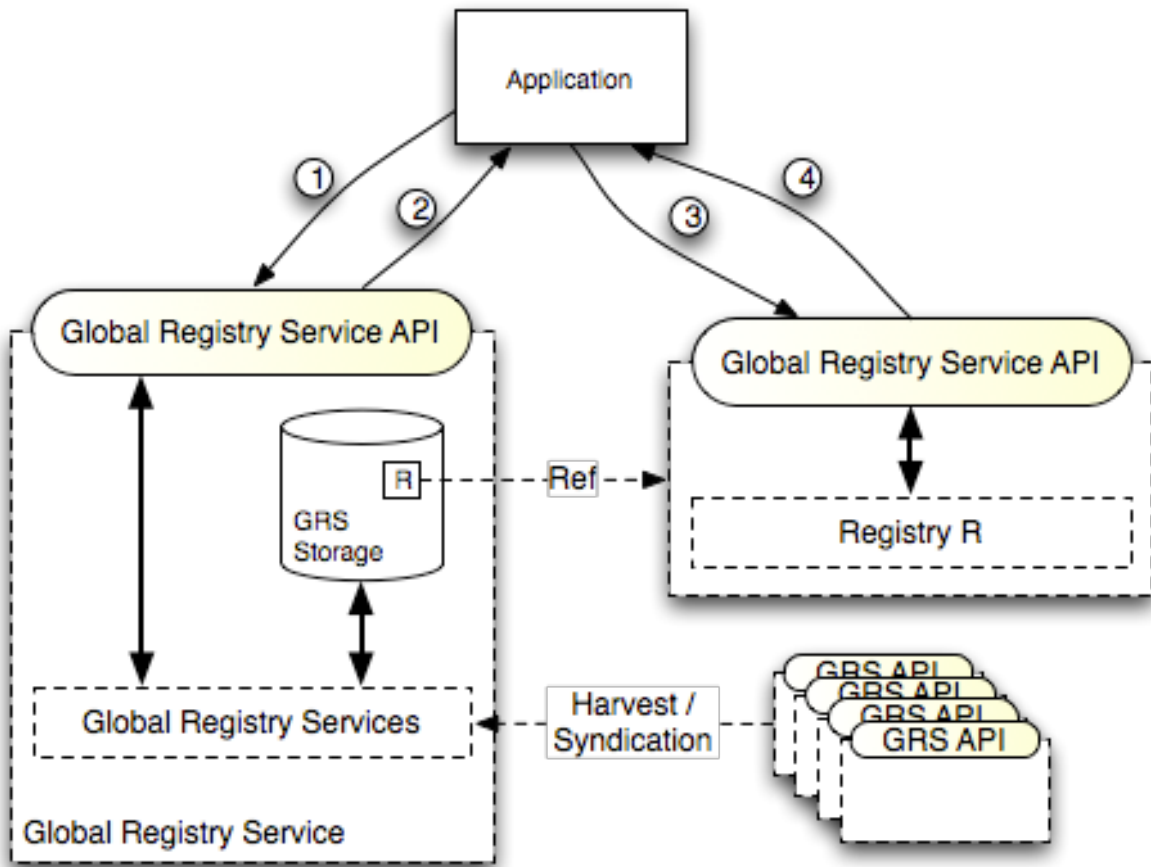


Fig. 4 - Application interacting with the GRN

By utilizing a common transport mechanism participating registries could maintain their local unique aspects but contribute to the GRN through supporting interactions utilizing a standard data model in combination with the GRN API.

Global Registries Initiative Meeting Report - Tucson April 6 & 7, 2010

It was also recognized that a GRN central portal would need to keep an inventory of participating registries, though this inventory would not necessarily be made public.

Photos of flip-chart pages used in the meeting will be available on the project Wiki.

Action Items

1. **Jeremy** to draft 1 page brochure describing the GRN to be used in discussions with interested parties
2. **Jeremy** to write-up and distribute these meeting notes
3. Comparison of data model candidates against GRS API model methods and functions
4. Profile details for participating registries - what information needs to be maintained about them in the inventory so that the operational service can function
5. Details for human discovery / access portal based on GRN API service
6. **Monica** will update GRI task list