Data Rights System 0.5

Protocol Conformance Testing

The purpose of Data Rights System 0.5 is to begin to test Data Rights Protocol implementations – and make it easy for consortium members to do so. The DRP team has developed a test suite and simple automation tools for partners to test the conformance of their protocol implementations. These resources are <u>on Github</u> and described below.

OSIRAA - Open Source Implementer's Reference of an Authorized Agent

Last month the Consumer Reports team made a Data Rights Protocol test suite available at https://osiraa.datarightsprotocol.org/.

OSIRAA is an open source implementers' reference of an authorized agent. This testing application is designed to simulate the role of an Authorized Agent implementation of the Data Rights Protocol (DRP). The application tests for the availability, correctness, and completeness of API endpoints of a Privacy Infrastructure Provider (PIP) or Covered Business (CB) application. It includes the following:

Admin Tool

A user may model a PIP or Covered Business in the Admin Tool, along with any number of users. For version 0.5, a covered business requires a Discovery Endpoint, API Secret and Auth Bearer Token, to be supplied by the PIP/CB partner.

Certification Test Definitions

The certification test suite defines the main Data Rights Protocol endpoints and articulates testing expectations of each endpoint. The suite tests conformance to the following <u>request states</u>. Implementers can use the reporting script in the OSIRAA application to document and share the results of conformance testing: https://osiraa.datarightsprotocol.org/reporting/

Test Runner

The test runner allows testing of the API endpoints for selected PIP/CBs for the Discover, Exercise and Status calls. Some calls require additional parameters such as a User or Covered Regime. These can be set via dropdowns above the button in each section to trigger the call.

Once the call is made, the app presents an analysis of the response. It shows the request url, the response code, and the response payload. If the response is valid json, it tests for required fields, fields in the response specific to the request params, etc.

Ready to test?

If you're ready to test with OSIRAA, contact the DRP team. You'll need to provide an endpoint, authorization header, and JWT signing secret. Then the DRP team can configure and run the test for you. You can run the test on your own at any time, as well. If useful, implementers can also spin up OSIRAA locally to aid in the development process.