

Protocol Transitioning Tiger Team (P3T)

January Meeting - 21 Jan 2024 20:00 UTC

James Dempsey, Adrian Damian, Sara Betocco, Dave Morris, Gregory Dubois-Felsmann, Kim G, Marco Molinaro, Paul Harrison, Russ Albury, Tessa Dower, Tom Donaldson, Joshua Fraustro, Janet Evans

Agenda

1. Introduction to the Protocol Transitioning Tiger Team
2. Initial scope of the project
3. Discussion on issues/concerns and priorities
4. Decision on goals for Jan - May
5. Decision on goals for in person workshop
6. Other business

Introduction to the Protocol Transitioning Tiger Team

Initial scope of the project

- Cone Search
- UWS
- TAP

Out of scope: VOTABLE

Discussion on issues/concerns and priorities

What are the biggest pain points? What should be looking at first

Enumerate changes such as - query parameters, use of GET/POST, case sensitivity

JF: UWS important as it can describe any task. Have definitions in technical document in OpenAPI.

RA: Structured error reporting, standardised error codes, getting the right error messages to the user.

DM: Can we make a common error standard - e.g. a standard library

PH: Historically been concerns with using the transport protocols, not entirely

convinced about a common approach

GDF: Have a pattern for sync queries of GET queries and responses. Where we have async, where we have remote state, recommend single pattern for errors. Don't expect single list of error codes would be popular but representation is an easier target.

TD: Don't need to move everything, as long as we have a plan to move things along

TD: Caution around use of schemas - can be brittle. Have a long history of clients being forgiving of the content. That may be due to English language description so not

Will need to be careful when changing versions to not break compatibility.

PH: May get stuck quickly if we try and keep compatibility with existing, so may need to consider version 2 etc

GDF (from chat): Perhaps we could even give worked examples of version changes as part of this work, so that there's some confidence that what we're doing is sustainable.

DM: Agree with the concerns about fragility - seen before with XML schema (note exists).

DM: Agree we will need to consider major version changes. May need to consider this group mapping out how to do that version change.

GDF: Clear that we will need to make breaking changes to achieve the group's goals. Clients often have funding and are able to adapt to these changes.

GDF: Would be good to also consider how future versions would be implemented in this work.

MM: Agree with GDF, help those after us so they don't need to rethink.

GDF: Machine readable formal specs may make it easier to present a single document summarising a protocol rather than having a stack of English language documents

Decision on goals for Jan - May

- What can we achieve in 5 months of part time work?

GDF: Invocation of services -
e.g. standardise astronomical coordinates, time parameters

GDF: Early target might be looking at

RA: OpenAPI spec for CS might be a good starting point. Could write OpenAPI or

could do Pydantic model

JF: Have been writing pydantic models for several VO standards. Also have a partially completed open api def of current UWS spec - could complete this in a month and discuss it next meeting.

TD: Could use request/response headers to help with VOTABLE transport - could be defined in open API

RA: Have started on concept of Concepts

Set up IVOA repo

GDF: Sounds good, but what can the rest of us do? Clean sheet Conesearch

DM:

OpenAPI models from Joshua and Russ

GDF: List of services that RUBIN will be supporting over the upcoming years.

Decision on goals for in person workshop

- What can we then achieve in 2 days of focused in person work?

Other business

Next meeting: 26 Feb 2024 at 20:00 UTC