



International Planetary Data Alliance (IPDA)

Minutes of IPDA-TEG meeting on 10 Nov 2011

Participants:

Alain Sarkissian (AS)

Emmanuel Arzoumanian (EA)

Dave Heather (DH)

Santa Martínez (SM)

Michel Gangloff (MG)

Emily Law (EL)

Yukio Yamamoto (YY)

Tome Stein (TS)

Sean Hardman (SH)

Steven Hughes (SHU)

Dan Crichton (DC)

Jesús Salgado (JS)

Pedro Osuna (PO)



Agenda for this meeting:

- 16:00 P. Osuna to introduce the meeting and report on Standardisation process
- 16:10 J. Salgado to report about PDAP actions and related work.
Open points should be addressed here for further discussions within the mailing list
- 16:30 S. Hughes to report on IPDA Query Language.
Open points should be addressed here for further discussions within the mailing list
- 16:45 S. Martínez to report about the PDS4 Prototype status.
Open points should be addressed here for further discussions within the mailing list
- 17:00 S. Hardman to report about the Registry status.
Open points should be addressed here for further discussions within the mailing list
- 17:15 E. Law to report on new IPDA Web site status.
Open points should be addressed here for further discussions within the mailing list
- 17:30 C. Acton to report on Geometry Requirements status.
Open points should be addressed here for further discussions within the mailing list

Actions to be reviewed:

1. Produce a standard template for extensions to PDAP and pass to the fly-by-product project (Pedro Osuna, Jesus Salgado).
2. Send out the PDAP extension for fly-by-product to the TEG mailing list (Yukio Yamamoto, Jesus Salgado).
3. Put together a structure for PDAP with a set of goals (Jesus Salgado).
4. What are the return types for PDAP? TEG formulate a proposal for submission to the SC for review. Also consider including other items pertinent for the SC to review prior to submission of PDAP. (Jesus Salgado, Pedro Osuna).
5. Align PDS4 model and software classes in PDAP (Jesus Salgado, Steve Hughes).
6. Generate an IPDA Data Dictionary service (Sean Hardman, Steve Hughes).
7. Develop a project for validation rules for PDS4 (Santa Martinez, Steve Hughes).
8. Review the mailing lists organization to make sure it is an effective tool (Dan Crichton, Alain Sarkissian, Pedro Osuna).

9. Produce a draft document on standardisation process (Pedro Osuna)

Meeting Summary

Standardisation process

PO reports that an internal version of a possible Standardisation process has been sent to DC for review before wider distribution. Will be sent to others soon.

PDAP related work

JS reports on PDAP related work:

PDAP Coordination group report

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During last IPDA meeting at Pasadena, the creation of a coordination group on PDAP activities was decided. Within this group, some tasks were planned to be developed during this year.

Task Description	Task leader
PDAP Core v1.0	I Jesus Salgado
PDAP FlyBy Extension	I Yukio Yamamoto
PDAP Spectral Extension	I Alain Sarkissian
PDAP Time Support	I Michel Gangloff
PDAP Geometrical Support	I Naru Hirata

Specific schedule per activity is being developed, apart from the identification of collaborators and final delivery.

1. PDAP Core v1.0

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After discussion at last SC meeting, some fields and improvements were agreed to be done into the PDAP v1.0 specification in order to propose it to the SC as a possible IPDA Recommendation.

- Include basic support for spectral range queries
- Include basic support for altitude range queries
- Define a standard XML schema for PDAP
- Better definition of capabilities discovery
- Align PDAP entities with PDS4

Group Members

- Jesus Salgado (lead) (ESA/PSA)
- Pedro Osuna (ESA/PSA)
- Steve Hughes (NASA/PDS)
- Sean Kelly (NASA/PDS)
- Yukio Yamamoto (JAXA)

Schedule

- 10/11/11 PDAP v.1.0 updated with new query fields (done)

New Template use

Support for spectral coordinate search

Support for altitude

Modification of mission name to instrument_host_name

(pending PDAP-PDS4 mapping activity)

- 15/12/11 PDAP v1.0 including capabilities discovery and XML schema

- 15/01/11 Support for PDAP registration

2. PDAP FlyBy Extension

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Create support for FlyBy products and FlyBy missions within PDAP to allow the discovery and publication of FlyBy products by PDAP services.

- Identification of new classes to be added to main PDAP UML diagram
- Identification of metadata need to characterize the new classes
- Prototype implementation of the extension

Group Members

- Yukio Yamamoto (lead) (JAXA)
- Jesus Salgado (ESA/PSA)

A extended list of authors is needed and it is the first step of the schedule.

Schedule

- 05/12/11 Search for a list of collaborators
- 07/01/12 Use Cases document
- 30/04/12 First updated Fly-By Extension document covering use cases
- 30/05/12 Implementation updated
- 30/06/12 Formal draft for TEG review

3. PDAP Spectral Extension

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Spectral data is very common in the planetary context. However, the proper characterization of spectral data requires the identification of specific classes within the PDAP UML and specific metadata to be added to the dictionary.

- Identification of new classes to be added to main PDAP UML diagram
- Identification of metadata need to characterize the new classes
- Prototype implementation of the extension, including consumption

within a spectral display tool

Group Members

- Alain Sarkissian (lead) (CNRS)
- Yasumasa Kasaba (Tohoku University)
- Jesus Salgado (ESA/PSA)
- Baptiste Cecconi (Observatoire de Paris)

Schedule

- 15/11/11 Set-up a list of collaborators. Expected final number of collaborators ~6/7 members (ongoing)
- 10/02/12 Discussions period
- 01/05/12 First draft document version
- 01/07/12 Updated draft version to be presented before IPDA meeting for review

4. PDAP Time Support Extension

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Current PDAP core specification has a basic time support both for queries and responses. However, some science use cases require time queries using different reference frames. In order to provide this advance support, a special extension will be produced.

- Identification of metadata needed to characterize different reference frames
- Describe proper use and conversions between reference frames
- Prototype implementation of the extension

Group members

- Michel Gangloff (lead)
- Nicolas André
- Baptiste Cecconi
- Vincent Génot
- Christian Jacquy
- Pierre Le Sidaner
- Jesus Salgado

Schedule

- 14/11/11 Discussions period. Kick-off meeting during next PV2011 meeting at Toulouse
- 15/01/12 Preparation of first draft
- 01/03/12 First draft version for TEG review

5. PDAP Geometry Extension

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Details pending from Naru Hirata

Teleconfs

- =====
- 04/11/11 PDAP core and FlyBy - Attendees YM/JS
 - 04/11/11 PDAP Spectral Extension - Attendees AS/JS

Next Teleconf
- 14/11/11 PDAP Time Support Extension - Details to be sent by MG

Registry status

SH reports on Registry Status:

The initial draft of the Registry Development and Coordination project plan has been sent to the ipda-teg mail list and will soon be posted to the IPDA web site.

This is a compilation of a couple of different areas where this project could take the registry implementation based on discussions I have had with Dan Crichton, including reworking the existing service registrations, expanding the registry to include IPDA member data set registrations and also support for a dictionary service.

The current implementation is undergoing an upgrade (by Sean Kelly) to support the latest release of the PDS Registry Service and will be deployed in December of this year. I am looking for a couple of volunteers who would like to participate in the project and help firm up the plan and move it forward.

IPDA Query Language

SHU reports on IPDA Query Language:

The "IPDA Query Language" project definition has been written and posted. The goal of the project is to define an IPDA Query Language that is compatible with the capabilities of the PDS and PSA data models. This project is to leverage the sample syntax resulting from the evaluation of various query languages in 2011. Additional team members will be recruited using the IPDA mailing lists.

PDS4 project

SM reports on PDS4 project:

Three points were mentioned at the beginning:

1. Steve has agreed to be co-leader in the project. The PDS4 project has two leaders: Santa Martinez and Steve Hughes.
2. It has been agreed to change the name of the project to 'PDS4 project' instead of 'PDS4 prototype project'. The project is expected to cover not only prototyping but also other topics.
3. Team members haven't been informed yet. Santa to send an email to the team members to confirm their participation after the telecon.

Regarding the project plan and current/future activities:

After some initial discussions, the project plan was sent to the Steering Committee on 2011-Oct-19, and to the TEG on 2011-Nov-08.

The PDS4 project activities need to be synchronised with the current PDS4 development focus. The recently released PDS4 build 2 will be used to identify areas that might be interesting for IPDA and that can be sup-

ported by PDS4. Dan, Steve and Santa will have some discussions in November-December in order to define the activities, goals and expected results for the project.

Although the main work in this project will be focused on prototyping using PDS4, we may consider other topics such as: data dictionaries handling, conversion tools needs or model/documentation review since there have been significant changes for the new release. This project may also consider some discussions on validation issues.

A limited list of proposed activities will be sent to the SC and team members in December.

The project will be organised in two phases: Phase 1 from January to March 2012, Phase 2 from March to May 2012.

IPDA Web Site

EL reports on IPDA Web Site development status.

Initial Project Plan was developed and posted on IPDA site (<http://planetarydata.org/projects/active-projects-for-2011-2012/website-development>).

Revised plan was sent to project members including Pedro Osuna, Sean Hardman, Sean Kelly and Emily Law.

A project telecon is tentatively scheduled on Nov 15 to finalize the project task and to discuss how to meet milestones set forth in the plan including:

- provide centralized web page for standards and templates
- provide procedure to help members post standards and project artifacts
- create public outreach web page for posting IPDA relevant information such as papers, presentations at conferences etc.
- move the web server from a temporary location to JPL permanently

Action item: upon receiving project plans from project leaders, post them onto IPDA site (<http://planetarydata.org/projects/active-projects-for-2011-2012>), send this site link to the TEG next week.

Geometry Requirements project

DC reports for C. Acton on geometry requirements:

Chuck Acton is currently putting together the project n Geometry Requirements. The focus is on trying to understand the needs for using the geometry information captured in the archive. It is also exploring the types of geometry services that might be useful for finding and analyzing data. Chuck is currently working on recruiting team members. Anyone interested in joining should contact him.

Actions review

1. Produce a standard template for extensions to PDAP and pass to the fly-by-product project (Pedro Osuna, Jesus Salgado).

Template created and sent to PDAP task leaders. **Action closed.**

2. Send out the PDAP extension for fly-by-product to the TEG mailing list (Yukio Yamamoto, Jesus Salgado).

Ongoing work. **Action still open.**

3. Put together a structure for PDAP with a set of goals (Jesus Salgado).

Mail circulated with organisation details. **Action closed.**

4. What are the return types for PDAP? TEG formulate a proposal for submission to the SC for review. Also consider including other items pertinent for the SC to review prior to submission of PDAP. (Jesus Salgado, Pedro Osuna).

Action still open.

5. Align PDS4 model and software classes in PDAP (Jesus Salgado, Steve Hughes).

JS circulated mail for discussion. Ongoing work. **Action still open.**

6. Generate an IPDA Data Dictionary service (Sean Hardman, Steve Hughes).

Action still open.

7. Develop a project for validation rules for PDS4 (Santa Martinez, Steve Hughes).

See report on PDS4 project. **Action still open.**

8. Review the mailing lists organization to make sure it is an effective tool (Dan Crichton, Alain Sarkissian, Pedro Osuna).

Some work done, but still not clear how to proceed. PO will send proposal to DC and AS and will make decisions from there. **Action still open.**

9. Produce a draft document on standardisation process (Pedro Osuna).

Internal version circulated to DC for review. **Action still open** until agreements are made.