Functionality Slices Working Group

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March 31, 2021

WG Summary

- **Problem:** Given the size and structure of the PMIx standard document, it can be difficult to find the PMIx components necessary for a given use case
- **Goal:** Provide a mechanism for focusing in on the aspects of the standard that are of interest to a particular user/use case
- **Proposed solution:** create an appendix with a list of high-level use cases and the PMIx APIs required to support them

Completed in 2020

- Created an appendix with common use cases
  - bootstrap (business card exchange)
  - debuggers / tools
  - hybrid programming models
- Posted a provisional PR for reading/voting
  - Covers ~21% of client-side interfaces
- Initial meeting to gauge interest within the power community

Plans for 2021

- ▶ Investigate additional use cases:
  - ▶ MPI sessions
  - ▶ instant-on
  - ▶ cross-version compatibility
  - ▶ fault tolerance
  - ▶ tiered storage (in collab with the storage WG)
  - ▶ workflow management (in collab with the Dynamic Workflows WG)
- ▶ Updating existing use cases based on changes to the standard
- ▶ Extending existing use cases with server-side APIs

Call for Participation

Help Wanted

- Identifying use cases that we've missed
- Documenting use cases
- Reviewing documented use cases

How to Join

- Subscribe to our Google Group mailing list
  - pmix-forum-wg-func-slices
- Weekly call
  - Thursdays @ 9am PT / 12pm ET
  - Webex info sent via mailing list
  - Subscribe to the PMIx Calendar for the meeting