

# 2019-10-28 Indy Contributors Call

## Summary

- The future of Indy Node
- Pros and cons of Plenum versus other ledgers

## Timezone: APAC Morning, US mid-day and Europe evening

We will be taking advantage of the staggered adoption of daylight savings time to have a call with additional Indy contributors. The Indy Contributors call will be on October 28 at 11AM US Pacific / 19H Central European Time / 21H Moscow Standard Time / 7H October 29 in New Zealand. Zoom link is changed too: <https://zoom.us/j/715671233>

We intend to record this call.

## Remember the [Hyperledger Code of Conduct](#)

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## Introductions

### Attendees

- [Nemanja Patrnogic \(donqui\)](#) <nemanja.patrnogic@evernym.com>
- [Richard Esplin](#) <richard.esplin@evernym.com>
- [Sergey Khoroshavin](#) <sergey.khoroshavin@evernym.com>
- Alexander Shcherbakov <alexander.shcherbakov@evernym.com>
- [Cam Parra](#) <camilop@kiva.org>

## Related Calls and Announcements

- Previous Indy Contributors call
- Identity Implementors Working Group call
  - Main place to get project updates, release status, and announcements.

## Release Status

- Indy Node
  - October: 1.11.0
    - PBFT view change
  - November: 1.11.1
    - Bug fixes
- Indy SDK
  - October: 1.12.1
    - Bug fixes
    - Might skip the release
  - November
    - ?
  - Future
    - GitLab migration alongside Jenkins (Foundation)?
    - Aries / Indy split: next step is aries-core-wallet
    - Anoncreds 2.0 (Sovrin Foundation, BC.gov?)
- Indy Catalyst
  - Production deployment testing: volume loads.
  - Won't go live in production at BC.gov until October.
  - Not yet migrated to Hyperledger. Needs more documentation.

## Work Updates

- Documentation improvements: Michael B and Stephen C
  - Need to review and prune out-of-date documentation (Alice / Faber treatment of pairwise DIDs is a key pain point)
  - Michael is working on Indy Agent walkthrough using C#
  - Finishing work on ReadTheDocs (2 more weeks?)
  - Cloud Compass is building the Linux Foundation EdX courses for Indy and Aries
- SDK 2.0 architecture / Indy-Aries split (Sergey)
  - Evernym: A PR with an example how the wallet can be separated; this is internal work
  - Kiva is working on a Futures implementation of threading (instead of call-backs)
- CI / CD: GitLab migration (Mike and Steve G)
- Advanced Schemas and W3C creds (Ken)
- Warnings from rust cargo clippy (Mike and Axel)
  - Epic: IS-1410
- New design for revocation / Anoncreds 2.0 (Mike)
  - Would be useful to have a comparison in performance between Anoncreds 1.0 and Anoncreds 2.0
  - Need a plan for changes to Indy Node
    - HIPE for overall changes, then a design PR for the changes specific to the different repos. <https://github.com/hyperledger/indy-node/tree/master/design>
- Replacing Indy-Crypto with Ursa in Indy Node (Mike and Cam)

## Main Business

- The future of consensus in Indy Node: proposal for moving from RBFT to Aardvark
  -  **INDY-2250** - Remove the need for RBFT replicas NEW
- Remaining concerns with the current Indy Ledger
  - Lack of a diverse contributor community
    - Who is going to work on solutions?
  - Interpreted language (Python) is slower than a compiled language (Rust)
  - Features from general purpose ledgers we would like
    - Observer nodes
    - Smart contracts
- Strengths of Plenum
  - Battle tested
    - BFT with a 25 node pool and 10 write transactions per second (1000 reads)
  - Identity specific
  - BLS State Proofs
  - Pluggable ledgers
- Next steps: dedicate an Indy Contributors call to the future of the ledger in early 2020.

## Future Calls

- Define the pull request review process for Indy Plenum/Node
  - Should define the process, including how we handle exceptions (emergency fixes shouldn't be blocked, but would require notification)
  - What is important in a good review?
    - Items from Evernym team:
      - covered by tests
      - has a link to the issue in Jira
      - fixed according to PoA
      - follows <https://github.com/hyperledger/indy-node/blob/master/docs/source/write-code-guideline.md>
  - Proposed Process (by Evernym team):
    - All Pull Requests can be reviewed by non-Evernym team members
    - Evernym team members will also do internal review in addition to external one
    - All interested parties are notified when a PR is sent
    - If a person wants to do an external review, he or she puts a comment or tag. This needs to be done in X hours.
    - Once a reviewer put a "want-to-review" tag, he or she need to finish review in Y hours
    - If no one wants to review a PR in X hours, or review is not finished in Y hours, we can do our internal review and merge the PR
    - An external review can be done against closed PRs as well, and Evernym team will process all findings ASAP
    - We may merge a PR with internal review only in case of urgency (critical fixes, release preparation etc.)
  - Items to be defined with the Community:
    1. A timeframe for external review (X):
      - X=12 hours, Y=2 days?
    2. What projects it should affect?
      - Plenum and Node?
      - Only Node?
      - We are not proposing SDK as it will be split to Aries in any case
    3. Who is going to commit to participate in this process?
- Migration of Indy-SDK to Aries-Core
- Requirements question: IS-1099, should we allow duplicate credentials from the same issuer?
- Non-secrets in the Indy Wallet
  - Cam is working on pluggable crypto. They wallet shouldn't decide what encryption you should be using.
  - Use cases where we would want to move keys between wallets
    - Moving the link secret / credential data from one device to another (synchronized storage).
    - Debug use cases
    - Richard's hit other uses cases that were better solved with DID Doc, pre-signing, signing API.
- Work-around with the web-crypto API

## Action items

- HIPE #138, Issue #144 (Ken and Brent)
  - Create a PR for changing status to ACCEPTED
  - Check for an Aries RFC
- PR to RFC #0019 to compare pack/upack to msgpack (Sergey)
- Richard and Sergey will close old pull requests with a descriptive comment.
- Mike wants to review the 61 cases of "unsafe" libindy calls and figure out if they are justified.

## Call Recording



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