* **Title:** Proposal to incubate a merged codebase
* **Goal:** Formally evaluate this proposed code base for the Hyperledger Project
* **Sponsor(s)**: Tamas Blummer, Christopher Ferris
* **Proposal:** Create a merged repository of the IBM and DAH contributions based on the successful experiment implemented at the F2F hackathon hosted by JPMC in NYC week of March 21, 2016 and advance that base to the point of formal evaluation.
* **Context**: On Feb 25, the TSC [agreed](https://docs.google.com/document/d/1e2WTwBWDCu8Otd-ZewOJM0Mz7VKAki7Hwh47FQ0YkBs/edit) to an experiment based on the [joint proposal](https://docs.google.com/document/d/1XV6U3kgZ31vZOz2nBLGe3vJgoLTnmOwv5qf3wo4lI68/edit?usp=sharing) from Digital Assets and IBM. We also agreed that we would host a F2F “hackathon” to bring the various members of the project together and offer an opportunity to make substantial progress on that proposal, the whitepaper, requirements and use cases. At the conclusion of the hackathon, the collaborators from multiple member companies working on the merged code base were able to produce running (POC) code that integrated components of the Blockstream, DAH and IBM proposed contribution codebases. A presentation that details what the team was able to achieve can be found [here](https://docs.google.com/presentation/d/185C9JUICwJQFnf6vH2nOEBNATAVG1XBVY-e-EV6oRSQ/edit#slide=id.g10e8c38c54_0_11), the merged code base is [here](https://github.com/hyperledger-incubator/hlp-candidate) and there’s a recording of the readout that should be published soon.
* **Motivation:** At the conclusion of the F2F, there were a number of energized and highly motivated developers (from a variety of member companies) that want to carry the experiment to its conclusion.

The team proposed the following high-level next steps:

* First steps should focus on improving the install and documentation to make it easier for others to engage in the project
* The TSC will aggressively work in parallel on incubation graduation evaluation criteria
* We will collectively have a clear README.md that describes what this is about - that it is one of potentially multiple incubation proposals
  + Implement additional features on the common API
  + Prunable, indexed, auditable storage for transaction on the blockchain
  + Revisit block level validation
  + Common representation of artifacts in .proto files for the gRPC protocol
  + Joint repository and build process
  + Configurability of merged base
  + High test coverage
  + Documentation of architecture, build process, etc

They also offered the following steps needed to deliver a robust implementation:

* Measuring and optimizing
  + Throughput, latency
  + Memory, CPU, storage etc. usage
* Storage strategy
  + Hot storage, archive, pruning
* Flexible deployment layouts
  + What goes to which process
  + What is deployed in DMZ vs. internal network
  + Is using docker images allowed
* Customer specific integration and configuration
* Monitoring
* The specifics of each of these will be published as github issues against the repository (see below).
* **Proposed Status of the Project:** Incubation
* **Resources:** IBM and Digital Assets are committing full-time engineering resources to ensure the success of this project. Many other members have already expressed interest in contributing to unit, integration, performance and scale testing as well as to the implementation itself. The following would be the initial set of maintainers for the project: Binh Nguyen, Tamas Blummer, Robert Fajta and Sheehan Anderson.
* **How to:** establish a single repository under the hyperledger github org with the merged code-base created at the F2F. Clearly label the README.md as an **Incubating project** of the Hyperledger Project. This will allow the developers that collaborated on the POC at the F2F as well as others interested in contributing to the effort to continue to make progress towards completion of the experiment while also allowing others in the community to join in the effort. The team expressed clear interest in being able to establish a permanent home for the stories (recorded in issues) and issues that comprise the fulfilment of the steps outlined above.