EOS Network
Foundation

Program and Operations Health Report

05 MAY 2023

Agenda

Section	Description
1	New Initiatives
2	Operations Metrics
3	Contracts, RFPs, Grants Metrics
4	Completed Projects

EOS Network Foundation

New Initiatives

March/April 2023 Release

Projects +	Summary Details	Updates	Status	Coding	Peer Review	Code Freeze	Integration Testing	Release Candidate
Leap								
Parallelize Speculative Read-Only Trx Exec.	Optimization of how read-only transactions are processed to improve node performance	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
3.2 Backport work	Remaining backport work completed in 3.2.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Lighter Validation for Relays	Optimization of block propagation from relay nodes that match certain configured criteria	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Auto-peer with next/previous BP	Optimization of BP peering to ensure most proximal production peers are connected	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Programmable Future Snapshots	Ability to schedule and unschedule future snapshots	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Multithread SHiP	Moving State History Plugin off the main thread for improved performance	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
SHiP Log Splitting, Block Log Splitting	State History Plugin logs and Block logs reformatted for improved storage and retrieval.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Leap 4.0 (new feature work, bugs)		Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
CDT								
ANTLER Project Manager	A set of standards and programs for smart contract developers to build and maintain smart contract projects. Some components will move into next release	CDT v4.0.0-rc1 released	Complete	✓	✓	✓	✓	✓
DUNE								
DUNE multi-versioning support	DUNE capable of upgrading itself and managing multiple versions of itself. Support for multiple versions of internal tooling.	Code has been merged	Complete	✓	✓	✓	✓	
Additional Components								
Performance Test Harness Stage 1	Performance harness designed to locally evaluate single node instances of a network.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Performance Test Harness Stage 2	Transaction generator improvements including configuring transaction type	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Regression Test Harness	A regression harness replacing eosio-launcher and improving overall flexibility.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
BN256 library	C++ port of the bilinear group BN256 Go library to support EOS EVM performance requirements.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓
Prometheus Exporter Plugin	New plugin to instrument nodeos for scraping data with Prometheus.	Antelope Leap v4.0.0 released	Complete	✓	✓	✓	✓	✓

Good   At Risk   Blocked

Project Health Scorecard

Project	Headline	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ENF Projects													
GoLang Security Port	COMPLETE - Antelope Leap v4.0.0 released	At Risk	At Risk	Good	Good	(end)							
Performance Test Harness	COMPLETE - Antelope Leap v4.0.0 released	Good	Good	Good	Good	(end)							
Performance Test Harness Stage 3	PR up to review HTTP Transaction Generator			Good	Good	Good							
Regression Test Harness	Start testing for Nodeos Process Controls	Good	Good	Good	Good	Good							
OCI Staff Augmentation	Replace #warning wasm_tests.cpp directive	Good	Good	Good	Good	Good	Future	Future	Future	Future	Future	Future	Future
Hypha - DAO	Three Proposal templates selected	At Risk	At Risk	Issues	Issues	Issues							
EOS EVM		Issues	Issues	Issues	Good	Good							
Leap Parallelize Speculative	COMPLETE - Antelope Leap v4.0.0 released	At Risk	At Risk	Good	Good	(end)							
Hubspot	Project paused for new vendor onboarding		Good	At Risk	Future	Future	Future	Future	Future	Future			
P2P Peer Discovery			Good	Good	At Risk	At Risk	Future	Future	Future	Future			
ENF Website Rebuild	FUNDAY brand exploratory session with ELT			At Risk	Good								
Antelope Projects (Coalition)													
Scalability+ IBC	Community support via TG channel	At Risk	Good	Good	Good	Good							Future
Scalability+ Instant Finality	Add "get_finality_status" API to HTTP plugin	At Risk	At Risk	Issues	Issues	Issues							Future
Wallet+ SDKs	Milestone #4 prelim. review complete	At Risk	At Risk	Issues	Issues	Issues					Future	Future	
Antler/CDT	CODE MERGED, READY FOR RC	At Risk	At Risk	Issues	Issues	Issues							
Coalition Ledger App	Resources unblocked, coding work to resume		Good	At Risk	Issues	Issues							

Legend: Future | Good | At Risk | Issues | Past start date | Future End Date | Complete

RFP Status Report

RFP#	Project Name	Notes	Status	Issued	Intent to Bid	Questions Due	Answers Due	Bids Due	Coalition/ Vendor Meeting*	Award
0011	P2P Peer Discovery	Coalition to review bids and confirm if meeting is necessary.	Complete	07 NOV	14 NOV	21 NOV	28 NOV	05 DEC	17 JAN	23 JAN
0010	Provable State Domains	Requirements for RFP in process*								

Future	At Risk	Issues	Complete

Not complete yet

Performance Test Harness, Phase 3

Report Date: 05 MAY 2023

EOS Network Foundation

Project Start Date: 02 FEB 2023
Project Summary: Performance Harness Phase 3 will add more automation to build on previous Phases 1 & 2. Includes adding additional features and analysis capabilities, along with Cloud CI/CD

Note: Previous Phases 1 & 2 included with Mar/Apr 2023 Leap 4.0 Release

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

April 2023
- Create an "operational Mode" framework
- Complete Block Producer Mode Documentation
- Create boost beast async http client/Update Boost version in cmake files
- API Node Documentation
- Create "Operational Mode" framework
- Block Producer Mode Documentation
- Create boost beast async http client
- Initial API node (HTTP NODE) support - Topology definition/configuration
- Split out control/config of producer, validation, api node in harness

May 2023
- Put up PR to review HTTP Transaction Generator – push transaction

Key Milestones

Description	Planned	Act/*Est
Baseline: EOS Mechanics CPU & RAM transactions	07 APR 2023	07 APR 2023
Block Producer Operational Mode	15 MAY 2023	*15 MAY 2023
API Node (HTTP Node) Operatal Mode	30 JUN 2023	*30 JUN 2023
Relay Node Operational Mode	30 SEP 2023	*30 SEP 2023
Canary Node Operational Mode	30 SEP 2023	*30 SEP 2023
SHiP Node Operational Mode	30 SEP 2023	*30 SEP 2023
Trace API Node Operational Mode	30 SEP 2023	*30 SEP 2023

Upcoming Activities / In Progress

- Initial reporting updates for "API Node" and http transaction generator
- In Peer Review:
  - HTTP Transaction Generator – push transaction
  - Wire support for "API Node" and HTTP Transaction Generator into Perf. Harness
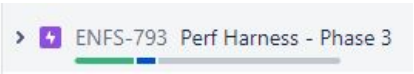
Issues / Risks / Escalations

- Update Key Milestones based on Phase 3 story development - *accepted*

Complete
In Progress
Backlog

> ENFS-793 Perf Harness - Phase 3

EOS Network Foundation

Project Start Date: 01 SEP 2022
Project Summary: Regression Harness to improve the maintainability, utility, and reliability of the test harness

Note: Key milestone dates adjusted to reflect Mar/Apr 2023 Release schedule. Architectural design outlines post-4.0 features

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

March 2023
- All v4.0 critical features have been merged into main for RC

April 2023
- Proceeding with post-4.0 Regression Test Harness per architectural design
- Create setup tools and installer for test harness
- Code merged, tests completed have failed on active/in progress stories:
  - Issues affect 66 files changed, 1078 insertions(+), 1805 deletions(-)
- WBS exercise performed for upcoming stories, estimated milestone dates

May 2023
- Start testing for Nodeos Process Controls milestone

Key Milestones

Description	Planned	Act/*Est
+Milestones Complete..		
Code in production	01 APR 2023	25 APR 2023
Post-4.0 release Milestones		
Nodeos Process Controls	22 MAY 2023	*22 MAY 2023
Capture Nodeos logs into an archive	01 JUN 2023	*01 JUN 2023
Migrate boilerplate into the test harness	15 JUL 2023	*15 JUL 2023
Expose log truncation	17 JUL 2023	*17 JUL 2023
Add Python logging library to regression harness	22 AUG 2023	*22 AUG 2023
Improve debugging environment/artifact capture	15 SEP 2023	*15 SEP 2023
Declarative configuration of cluster nodes	01 OCT 2023	*01 OCT 2023

Upcoming Activities / In Progress

- Update 'WalletMgr.py' logging directories
- Migrate launcher - move nodeos process control fully into Node.py
- Migrate configuration options out of the config file into command line
- Implement nodeos process control in launcher.py
- Enhance all regression Python tests to verify clean shutdown
- Detect abnormal nodeos termination
- Python log truncation

Issues / Risks / Escalations

- Additional milestone deliverables to be documented for reporting - *accepted*
- Engineers troubleshooting the test failure from code merge - *escalated*
- Est. dates of stories added to milestones extended beyond Aug/Sept - *accepted*

Complete	🟩
In Progress	🟦
Backlog	⬜

> ENFS-166 Regression Testing Enhancements

EOS Network Foundation
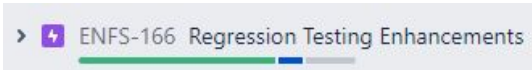
Project Start Date: 01 SEP 2022
Project Summary: OCI will hand bug fixes, upgrades and other assigned projects that fall under the Leap 3.1, 3.2, and 4.0 environments.

Note: Key milestone dates adjusted to reflect Mar/Apr 2023 Release schedule

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

April 2023
- Prometheus 5.0: Prometheus plugin enhancement
- 5.0: Proposal: Nodeos Endpoint IP and Port Configuration
- 5.0: clean function for escaping control characters in a string and truncating it
- 5.0: Address 'TestHarness' installation location
- 5.0: remove circular dependency between producer_plugin & chain_plugin
- Bug Fixes (backport): Starting v4.0.0-rc2 from snapshot crashes nodeos
- Bug Fixes (backport): fix not fail on signature checks for dry-run txns

May 2023
- 5.0: Use github issue instead of #warning directive in wasm_tests.cpp

Key Milestones

Description	Planned	Act/*Est
+Milestones Complete..		
EVM	15 JAN 2023	14 APR 2023
3.3: Block Log Splitting	01 MAR 2023	03 MAR 2023
Leap 4.0 (all new feature work and bugs)	01 MAR 2023	17 MAR 2023
Leap 5.0 (all new feature work and bugs)	30 SEP 2023	*30 SEP 2023
Bug Fixes (backport)	TBC	TBC

Upcoming Activities / In Progress

- 5.0: Update handling of the http-max-response-time-ms & abi-serializer=max
- 4.0 GA-SHiP log splitting max stride slice retention-expect value defaults to unltd
- In Peer Review:
  - 5.0: Proposal: Boost JSON into fc.
  - 5.0: SPIKE: Decoupled instrumentation feasibility
  - Prometheus 5.0: Prometheus plugin enhancement
  - 5.0: Implementation for Nodeos Endpoint IP and Port Configuration

Issues / Risks / Escalations

- None

Complete	(green)
In Progress	(blue)
Backlog	(gray)

> ⚡ ENFS-493 EVM
> ⚡ ENFS-510 Prometheus (Leap 4.0)

> ⚡ ENFS-641 SHiP & Block Log Splitting
> ⚡ ENFS-642 Open SSL Dependency Removal

> ⚡ ENFS-829 Leap 5.0
> ⚡ ENFS-830 Prometheus (Leap 5.0)
> ⚡ ENFS-912 Bug Fixes (backport)

9

DAO

Hypha

Report Date: 04 MAY 2023

Project Start Date: 12 SEP 2022
Project Summary: Hypha to create a DAO management system for EOS

Final Project Milestone: Warranty Period (x6): 07 AUG 23 to 09 JAN 24

Status Scorecard

Schedule			☑
Scope	☑		
Resources	☑		

Highlights & Accomplishments

April 2023
- Three proposal type badges completed
- Voting configuration screen completed
- ENF feedback provided for milestone #4, discuss next steps
- Restructured development process to incl. feature branches dev methodology
- Hypha presented milestone #5 to ENF for review
- Hypha DAO added to www.eosnetwork.com/eos-ecosystem page
- ENF feedback provided for milestone #5, discuss next steps
- Milestone #6 stories and features are groomed, planning completed
- Milestone #5 extended video presentation submitted to ENF

May 2023
- Selected three Proposal templates, descriptions an contents for DAO
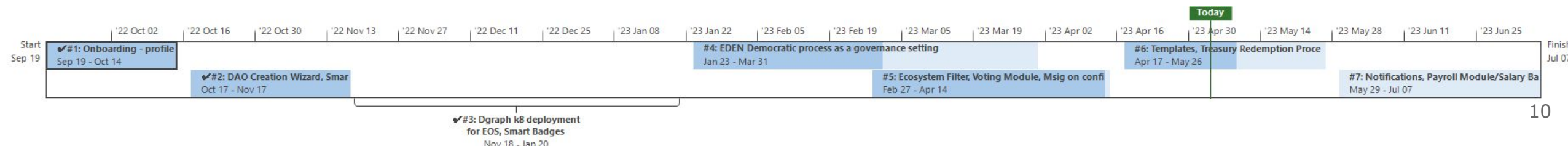- Hypha prepared a draft blog article to highlight the DAO features

Key Milestones

Description	Planned	Act/*Est
#1: Onboarding - profile service deploy for EOS, Mobile Version, Pricing Model +Freemium, staking and burning	14 OCT 2022	13 OCT 2022
#2: DAO Creation Wizard, Smart Contracts deploy on EOS	25 NOV 2022	17 NOV 2022
#3: Dgraph k8 deployment for EOS, Smart Badges	20 JAN 2023	03 FEB 2023
#4: EDEN Democratic process as a governance setting	24 FEB 2023	*31 MAY 2023
#5 Ecosystem Filter, Voting Module (Config Page), Msig on config settings, Policy Proposals, Quest Proposals, Circle Proposals	14 APR 2023	03 MAY 2023
#6 Templates Treasury, Redemption Processing	26 MAY 2023	*26 MAY 2023
#7 Notifications, Payroll Modules/Salary Bands, Multi-lingual, First Signer Pays	07 JUL 2023	*07 JUL 2023

Upcoming Activities / In Progress

- Implementation of templates, front-end and back-end in dev, 60% complete
- Config settings template contents, types, and descriptions
- Treasury redemption process, semi-automated for end-users
- Add API integration, MSIG to redemption
- B. Lovejoy and Hypha team to set up a Twitter spaces event
- Beta launch MVP, security review, bug fixes
- Address Beta launch addn't features to enhance DAO features

Issues / Risks / Escalations

- Hypha to outline scope for Milestone #4, integrate into schedule - *escalate*

10

Project Start Date: September 2022 (new baseline) / January 2023 (new MVP scope)
Project Summary: Build an Ethereum Virtual Machine based on the EOS network, a turn-key solution for developers to operate their apps on a full #Ethereum-compatible chain and benefit the high throughput, scalability, security and reliability from the EOS infrastructure
NOTE: Planned dates updated to reflect holiday and PTO schedules / MVP scope amended

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

March 2023
- Testnet v0.3 deployed and launched

April 2023
- MSIG for mainnet approved by BPs and executed
- Sentnl.io security audit report
- Mainnet launch
- Launch www.eosnetwork.com/eos-evm
- Proj. submission intake form https://eosnetwork.com/eos-evm/#ecosystem-intake
- Repo open sourcing
- Backlog created and v0.5 content identified

May 2023
- Testnet upgrade with v0.4-official
- Draft product roadmap for future releases

Key Milestones

Description	Planned	Act/*Est
API Compatibility	22 NOV 2022	15 NOV 2022
+Milestones - Complete...		
Variable Simulation Model	08 NOV 2022	06 JAN 2023
Testnet Deployment Preparation	02 DEC 2022	16 DEC 2022
Silkworm Testnet without Token Economy	27 DEC 2022	19 JAN 2023
Bridging / Send EVM Action	24 JAN 2023	20 MAR 2023
Gas Fee Feature / Adjustable Base Gas Price	11 NOV 2022	20 MAR 2023
EVM Runtime Contracts Improvements	03 FEB 2024	10 FEB 2023
Additional Security Audit Review	23 DEC 2022	05 APR 2023
Candidate for Mainnet / Launch	08 MAR 2023	14 APR 2023

Upcoming Activities / In Progress

- Mainnet upgrade with v0.4-official
- Additional security audit review

Issues / Risks / Escalations

- Post-launch program reconstruction is being defined. This will impact resources and project structure - *monitor*
- Team velocity is being measured on first and second sprints. This might affect timelines - *monitor*

11

EOS Network Foundation

Project Start Date: 15 FEB 2023
Project Summary: CRM platform to connect marketing and communications platforms together to focus on creating more awareness and fostering business development initiatives.

Status Scorecard

Schedule	
Scope	
Resources	

Highlights & Accomplishments

March 2023
- Meeting with outside Marketing automation vendors to discuss support options
- Marketing Automation vendor to discuss package options with ENF
- Meeting with HubSpot customer support team to discuss two instances
- Executive sponsors review, approved schedule and timeline proposal
- Contacts and businesses moved from original to new instance
- Adjust setting to allow contacts to be associated with company contact information
- Meeting with DUD vendor to discuss impact to ENF website
- DUD completed review of ENF website, repaired all broken feeds
- DUD provided a list of all fields that are not properly linked in HubSpot for review
- All users are added to new instance with current ENF emails
- Old instance has been deactivated, old data removed and no longer accessible

April 2023
- Review, import data provided by Zaisan
- Meeting with Marketing to discuss project blockers, next steps

Key Milestones

Description	Planned	Act/*Est
#1 Scope, Milestones, Stakeholder List, Project Schedule	17 FEB 2023	17 FEB 2023
+Milestones Complete..		
#4 DUD vendor reviews website connections	13 MAR 2023	13 MAR 2023
#5 Review user-level access, permissions, user emails	14 MAR 2023	*TBD
#6 Unify instances, close old instance	15 MAR 2023	15 MAR 2023
#7 Instance coding and setup	21 MAR 2023	*TBD
#8 Dashboard review, configuration & Data review, dashboard testing	22 MAR 2023	*TBD
#9 HubSpot Reporting	30 MAR 2023	*TBD
#10 Document Processes, Process Metrics	04 APR 2023	*TBC

Upcoming Activities / In Progress

- **PROJECT PAUSED**
- Review ENF user-level accesses, permissions
- Complete ABM configuration setup

Issues / Risks / Escalations

- Billing cycles for two instances to be reviewed - *resolved*
- Onboarding new vendor may impact milestone schedule - *blocked*
- Clarification around scope unclear, pending vendor onboarding - *escalated*

FD Blockchain Lab	**P2P Peer Discovery**	ENF

Report Date: 05 MAY 2023

Project Start Date: 02 FEB 2023 (Contract execution)

Project Summary: The mandate of the project is to implement improvements to peer node discovery and synchronization processes within the peer-to-peer (P2P) protocol of the nodeos service

Status Scorecard

Schedule		✓	
Scope	✓		
Resources	✓		

Highlights & Accomplishments

March 2023
- 23-Mar: Initial review and comment from one approver on PR for TR02/03: Add configuration items chain-alias, chain-id, chain-alias-mapping

April 2023
- 4-Apr: PR #846 (P2P improvement TR02/03) and PR #918 (Peer discovery) are being reviewed by delegates from coalition. Tech team is addressing the comments
- 14-Apr: Call with milestone approvers and Tech team being schedule in order to address questions and comments
- 17-Apr: Second milestone approved
- 27-Apr: Milestones content and calendar reviewed and submitted to coalition members for approval

May 2023
- 5-May: New milestones content and calendar approved by coalition

Key Milestones

Description	Planned	Act/*Est
Contract Execution	02 FEB 2023	02 FEB 2023
Local GitLab and Local environment	01 MAR 2023	01 MAR 2023
Automated Peer Discovery and Management	29 MAR 2023	*24 MAY 2023
Custom Chain Id	10 MAR 2023	10 MAR 2023
Alias Configuration	17 MAR 2023	17 MAR 2023
Peer Refreshing	24 MAR 2023	*24 MAY 2023
Nodes Setting	29 MAR 2023	*24 MAY 2023
Automated Testing	12 APR 2023	*24 MAY 2023
Testing and delivery	22 MAY 2023	*20 JUL 2023
Maintenance and support	20 AUG 2023	*20 AUG 2023

Upcoming Activities / In Progress

- Specifications to be completed with direction from Antelope core engineering team

Issues / Risks / Escalations

- Review and approval of deliverables are dependent on availability of milestone approvers - *monitor*
- Requirements might need clarifications to confirm the overall direction of the solution - *escalated*

Today

| 5 Feb '23 | 19 Feb '23 | 5 Mar '23 | 19 Mar '23 | 2 Apr '23 | 16 Apr '23 | 30 Apr '23 | 14 May '23 | 28 May '23 | 11 Jun '23 | 25 Jun '23 | 9 Jul '23 | 23 Jul '23 | 6 Aug '23 | 20 Aug '23 |

Start
Thu 2 Feb

Automated Peer Discovery and Management
Mon 27 Feb - Wed 24 May

Testing and delivery
Thu 25 May - Thu 20 Jul

Maintenance and support
Fri 21 Jul - Sun 20 Aug

Finish
Sun 20 Aug

✓ Contract Execution
Thu 2 Feb

P2P Code Rewrite
Sun 20 Aug

Report Date: 04 MAY 2023

Status Scorecard

Schedule	✅	🟨	🟥
Scope	✅	🟨	🟥
Resources	✅	🟨	🟥

Project Start Date: 07 FEB 2023
Project Summary: Rebuilding the EOS Network Foundation website www.eosnetwork.com
External Vendors: Graphic Mint, Double Up Digital, FUNDAY

Highlights & Accomplishments

March 2023
- Introduction call with FUNDAY, discuss tentative project timeline
- Members Page: Upvote Delegate result widget
- Kick-off with FUNDAY and Graphic mint to discuss key milestone dates

April 2023
- ENF Post-Game and Blockchain Events Information Gathering + Regroup
- Discussions around potential phased approach due to tight timelines
- FUNDAY expanding scope for complete brand architecture
- Vendors approve updated timelines to project schedule
- GameFi events and market research session complete

May 2023
- FUNDAY exploratory meeting with ELT team for brand, logo strategy

Key Milestones

Description	Planned	Act/*Est
#1 UX Design (Graphic Mint)	06 MAR 2023	06 MAR 2023
#2 Content Strategy, Information Architecture (Graphic Mint)	06 MAR 2023	06 MAR 2023
#3 Branding Strategy, Brand Messaging (FUNDAY)	07 JUN 2023	*07 JUN 2023
#4 UI Design, Design Systems (Graphic Mint)	23 JUN 2023	*23 JUN 2023
#5 Web Content (ENF)	27 JUN 2023	*27 JUN 2023
#6 Website Development (DUD)	22 AUG 2023	*22 AUG 2023
#7 QA Review, testing (DUD)	30 AUG 2023	*30 AUG 2023
#8 Website Launch (DUD)	31 AUG 2023	*31 AUG 2023
#9 Post-Launch, Punch List (ENF, DUD)	16 SEP 2023	*16 SEP 2023

Upcoming Activities / In Progress

- Workshop to deliver findings to Graphic Mint and FUNDAY
- Graphic Mint and FUNDAY discovery sessions
- FUNDAY Branding Strategy, Brand Messaging presentation to ENF on 25 MAY
- Graphic Mint to start on UI Design, Design Systems milestone in June
- Double Up Digital to start working on site rebuild in June

Issues / Risks / Escalations

- Aggressive tight timeline, critical path milestones - *escalated*

14

| Scalability+ | **IBC (inter blockchain communication)** | Origin | **Report Date:** 03 MAY 2023 |

Project Start Date: 23 AUG 2022
Project Summary: IBC (inter blockchain communication) protocol allows for any action taking place on an EOSIO blockchain (chain A) to be cryptographically provable to another EOSIO blockchain (chain B).

SLA Period: 24 months (end 27 AUG 2024) | https://github.com/cryptomechanics | https://antelopeibc.io/

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

March 2023
- TraceAPI architecture presented to Greymass for review
- EOS USA review of State History Plugin complete, approved

April 2023
- Coalition added requirement to support Trace API to Milestone #8,
- N. James to review Milestone #5
- Milestones #5 and #8 are complete, approved by Coalition
- IBC project waiting for IF to complete final milestone #6
- WAX successfully completed 'to' and 'from' transactions
- IBC webpage launch https://eosnetwork.com/ibc-using-eos/
- Addressed error messages submitted in Antelope IBC Protocol Telegram channel

May 2023
- Team meeting to outline upcoming work, timelines and requirements

Key Milestones

| Description	Planned	Act/*Est
#1 IBC Protocol updates	27 SEP 2022	03 NOV 2022
+Milestones Complete..		
#4 Release of Firehose + proof API server bundle	22 NOV 2022	15 DEC 2022
#5 Monitoring and analysis tools: API to monitor contracts on+alert mechanism *(Coalition approved change)*	27 JUL 2023	07 APR 2023
#6 Integration of IBC and Instant Finality *(+IF milestone #5: Successful private testnet deployment)*	22 AUG 2023	*22 AUG 2023
#7 Imp. of helper functions, database structures and API for proof generation ~~in Nodeos~~ *(Coalition approved change)*	28 NOV 2023	13 MAR 2023
#8 Support & consult w/ History Solution Providers to improve proof APIs: Firehose, State History Plugin, TraceAPI *(Coalition approved change)*	28 NOV 2023	07 APR 2023

Upcoming Activities / In Progress

- ENF Marketing starting on podcast and blog posts for upcoming IBC announcements
- Z. Gall, N. James supporting Origin on Technical AMA call with interested developers
- IBC planning for integration with IF, launch on testnet

Issues / Risks / Escalations

- Order of operations plan for IBC and IF launch on testnet - *escalated*

15
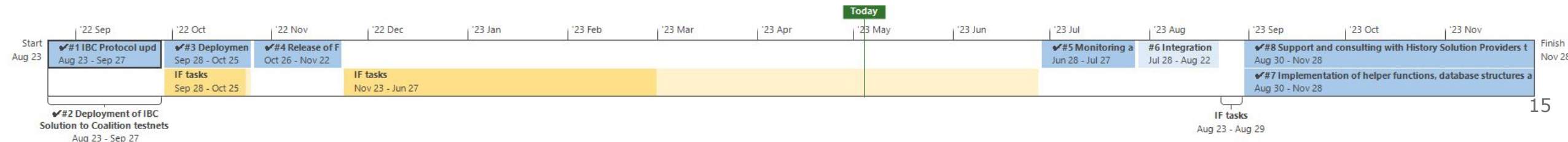
Scalability+	IF (Instant Finality)	Origin		

Report Date: 03 MAY 2023

Project Start Date: 23 AUG 2022
Project Summary: Instant Finality implements near-immediate byzantine fault-tolerant deterministic finality as part of the core EOSIO protocol in order to improve responsiveness of application

SLA Period: 24 months (end 27 AUG 2024)

Status Scorecard

Schedule			☑
Scope		☑	
Resources		☑	

Highlights & Accomplishments

March 2023
- Milestone #2 Linearly aggregable signatures ready for review, submitted to ENF
- Unit tests framework completed
- Refactored Hotstuff consensus code to exist as an independent library
- Refactored Hotstuff consensus code to separate qc_chain from pacemaker

April 2023
- IBC milestone #5 and #8 completed, waiting for IF to complete milestone #6
- Completed WASM implementation, verify action and 'from' message
- Native go/cpp and assembly implementation benchmarked, positive results
- Team discussions about upcoming availability to clear project blockers

May 2023
- Team meeting to outline upcoming work, timelines and requirements
- Implement "get_finality_status" API to the HTTP plugin, useable by light clients
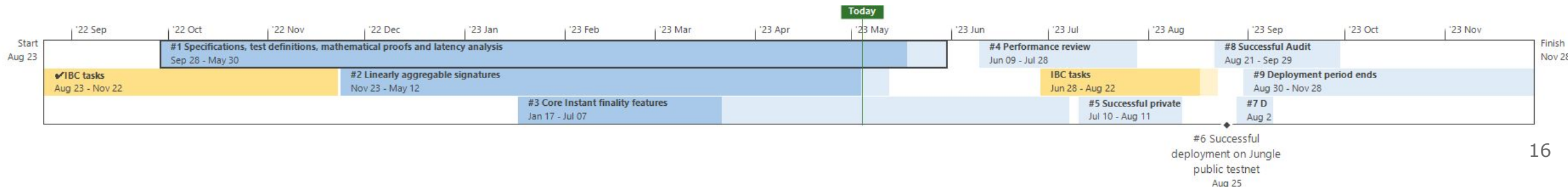
Key Milestones

Description	Planned	Act/*Est
#1 Specifications, test definitions, mathematical proofs, latency analysis	25 OCT 2022	*30 JUN 2023
#2 Linearly aggregable signatures	15 JAN 2023	*12 MAY 2023
#3 Core Instant Finality features	28 FEB 2023	*07 JUL 2023
#4 Performance review	28 MAR 2023	*28 JUL 2023
#5 Successful private testnet deployment *(+IBC milestone #6 - integrate IBC with IF)*	28 MAR 2023	*11 AUG 2023
#6 Successful deployment on Jungle public testnet	23 MAY 2023	*25 AUG 2023
#7 Documentation	27 JUN 2023	*08 SEP 2023
#8 Successful Audit	29 AUG 2023	*29 SEP 2023
#9 Deployment period ends *(support with activation)*	28 NOV 2023	*28 NOV 2023

Upcoming Activities / In Progress

- HotStuff core protocol consensus mech. as base consensus algorithm
- Core IF unit + integration tests, IF protocol feature activation
- Integration with Leap data structures
- A. Hayrapetian to provide latency analysis feedback, edge cases for Core IF features
- Linearly aggregable signatures PR initial review

Issues / Risks / Escalations

- Limited ENF availability impacting milestone #1 & #2 reviews - *resolved*
- A. Hayrapetian to provide input, feedback on milestone #3 features - *resolved*
- Order of operations plan for IBC and IF launch on testnet - *escalated*
- IF timeline critical to include feature with Antelope Leap v5.0. release - *escalated*

Today

| Start Aug 23 | | | | | | | | | | | | | | | Finish Nov 28 |

#1 Specifications, test definitions, mathematical proofs and latency analysis
Sep 28 - May 30

#4 Performance review
Jun 09 - Jul 28

#8 Successful Audit
Aug 21 - Sep 29

✔ IBC tasks
Aug 23 - Nov 22

#2 Linearly aggregable signatures
Nov 23 - May 12

IBC tasks
Jun 28 - Aug 22

#9 Deployment period ends
Aug 30 - Nov 28

#3 Core Instant finality features
Jan 17 - Jul 07

#5 Successful private
Jul 10 - Aug 11

#7 D
Aug 2

#6 Successful deployment on Jungle public testnet
Aug 25

Project Start Date: 12 SEP 2022
Project Summary: Establish a series of core Antelope client protocols and create a suite of open-source Antelope web client SDKs

Link: https://github.com/wharfkit/ - key milestones updated 01 FEB 2023 to v4 (*Coalition approved*)

Status Scorecard

Schedule	🟩	🟨	☑🟥
Scope	☑🟩	🟨	🟥
Resources	☑🟩	🟨	🟥

Highlights & Accomplishments

April 2023
- Minor releases published for multiple libraries to address bugs and upgrade deps
- Community feedback on graphic user interface bugs, repaired
- Updates to session storage, account storage methods
- Developed Wharf webpage for Session Kit, ready to launch
- Added Restore All method to Session Kit
- Released v0.4.0 for the Session Kit and Wallet Plugins
- The Web Renderer UI v0.4.0 also released with an overhauled user interface
- Added a new (2nd) TransactPlugin for transaction finality to facilitate callbacks
- Milestone #4 completed, submitted for review

May 2023
- Milestone #4 review complete, add'l questions to be submitted to Greymass
- Contract Kit code generator to automatically create code for devs
- Minor corrections and optimizations for Session Kit
- Improvements to Session Kit user interface to resolve design issues

Key Milestones

Description	Planned	Act/*Est
#1 Architecture	15 OCT 2022	17 OCT 2022
#2 Product Suite Branding	13 JAN 2023	11 JAN 2023
#3 Session Kit	23 JAN 2023	13 MAR 2023
#4 Browser Kit + Plugins	22 FEB 2023	*12 MAY 2023
#5 Session Kit Integrations + Localization	08 APR 2023	*19 MAY 2023
#6 Contract Kit + Account Kit	02 JUN 2023	*02 JUN 2023
#7 Contract Kit Implementations	07 JUL 2023	*07 JUL 2023
#8 Contract Kit Templates	22 JUL 2023	*22 JUL 2023
+Milestones to follow...		
#12 Website, Documentation, Portal	30 SEP 2023	*30 SEP 2023

Upcoming Activities / In Progress

- Design of UI elements for @wharfkit/web-ui-renderer
- Continued development of wallet/transact plugin(s) for Session Kit
- Development of a console-based UI renderer for development
- Finalizing UI specification into document format for publishing
- Login plugin system, address community feedback
- Documentation for Session Kit, Core Libraries

Issues / Risks / Escalations

- Greymass staff PTO may have impact on project schedules - *accepted*
- Milestone #4 tasks completed sequentially impacting schedule - *accepted*
- No external wallets available with EOS using scatter, Milestone #9 - ***blocked***

17

Project Start Date: 30 NOV 2022
Project Summary: Contract Development Toolkit (CDT) is a C/C++ toolchain targeting WebAssembly (WASM) and a set of tools to facilitate development of smart contracts written in C/C++ that are meant to be deployed to an Antelope blockchain

Link: https://github.com/AntelopeIO/cdt

Report Date: 04 MAY 2023

Status Scorecard

Schedule			☑
Scope	☑		
Resources	☑		

Highlights & Accomplishments

February 2023
- Design review presentation of Antler-proj for ENF Directors, Management team
- Initial code review completed, PR merged
- Final PR put up for review
- Implement Cmake from project file completed

March 2023
- Final PR review completed, feedback received and additional bugs discovered
- Repair to code complete, bugs repaired
- Build System Documentation and Polish added to Build System scope
- Repair additional bugs discovered with latest PR review
- Final PR put up for review
- Final feedback addressed, code merged into main

May 2023
- CDT v4.0.0-rc1 released

Key Milestones

Description	Planned	Act/*Est
DUNE auto-upgrade	01 FEB 2023	26 JAN 2023
CDT Debugging Framework (ANTLER)	TBD	*TBD
CDT Package Management System (ANTLER)	20 FEB 2023	31 MAR 2023
CDT Build System (ANTLER)	23 FEB 2023	31 MAR 2023
CDT Code complete (release candidate)	01 APR 2023	05 MAY 2023
CDT Code in production	01 APR 2023	*22 MAY 2023
Dune Code complete (release candidate)	01 APR 2023	*17 MAY 2023
Dune Code in production	01 APR 2023	*31 MAY 2023

Upcoming Activities / In Progress

- **CDT COMPLETE**
- **DUNE CODE MERGED, READY FOR RC**

Issues / Risks / Escalations

- None
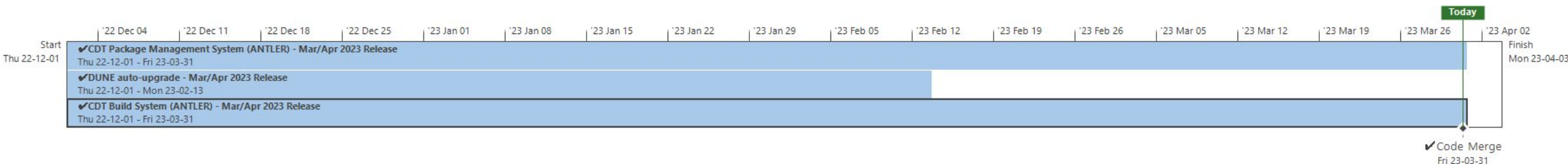
Coalition Ledger App

Project Start Date: 13 FEB 2023
Project Summary: Update the Ledger App, setup four chains on Ledger using one binary, and complete the adaptations to the source code of the EOS app

NOTE: Project baseline adjusted based on launch criteria provided by Ledger

Status Scorecard

	Green	Yellow	Red
Schedule		☑	
Scope		☑	
Resources			☑

Highlights & Accomplishments

March 2023
- TLOS manager & dashboard icons complete
- Draft timeline & milestone schedules presented to Coalition during call 02 MAR
- Submit scope expansion to Ledger for feedback and approval:
  - Add 5th app to scope: EOS, TLOS, WAX, UX & Antelope
- ENF + Ledger meeting to discuss technical requirements, project definition
- Ledger provides clarification around launch criteria, deliverables

April 2023
- Milestone schedule revised based on Ledger feedback, ENF staff availability
- Request submitted to Ledger to clarify marketing content requirements, web pages

May 2023
- Engineering availability blocker clear, coding work to resume

Key Milestones

Description	Planned	Act/*Est
#1 Icons for Ledger Live and app	28 APR 2023	*12 MAY 2023
#2 Submitting PR to ledger	26 MAY 2023	*26 MAY 2023
#3 PR to ledger passes all automated tests	02 JUN 2023	*02 JUN 2023
#4 Go to market plan (social, AMA, blogs)	02 JUN 2023	*02 JUN 2023
#5 Submitting the form to Ledger	05 JUN 2023	*05 JUN 2023
#6 Security Audit	31 JUL 2023	*31 JUL 2023
#7 Documentation/user tutorial, new web pages/content	30 JUN 2023	*30 JUN 2023
#8 Functional review	22 SEP 2023	*22 SEP 2023
#9 Ledger merges PR	22 SEP 2023	*22 SEP 2023

Upcoming Activities / In Progress

- Coalition to approve draft timeline and milestone schedules
- TLOS, EOS to complete manager & dashboard icons
- Create content for Ledger webpage and Ledge app information page

Issues / Risks / Escalations

- Waiting on feedback from Ledger pertaining to 5th app - *resolved*
- Clarification around marketing content to be defined from Ledger - *blocked*
- E. Passmore currently unavailable to support dev work until 01 MAY - *resolved*
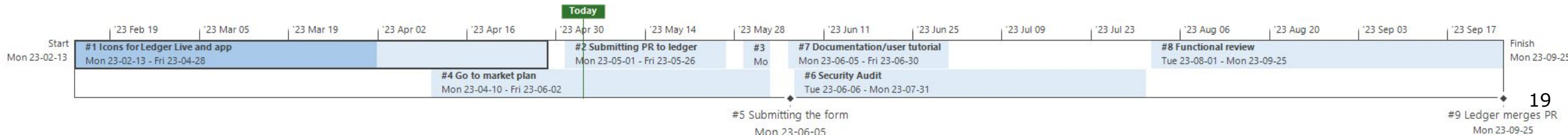
Operations Metrics

Operations Scorecard (Rolling 12 months)

Area / Metrics	Link	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Market Funding													
Direct Grants Fully Approved (#)	+	0	1	0	2	0	3	0					
Direct Grants Fully Approved ($)		$0	$10,000	$0	$275,000	$0	$233,000	$0					
Direct Grants Rejected (#)		1	7	2	0	11	2	0					
Direct Grants Rejected ($)		$50,000	$1,093,785	$50,000	$0	$1,158,630	$297,000	$0					
Direct Grants Processing Time (days)		214	122	119	87	136	79	0					
Developer Relations													
# of DevRel tickets closed	+	11	5	20	9	20	21	0					
# of guides completed (Cumulative)		0	0	0	3	4	6	0					
Regression Metrics - Antelope													
First Pass Yield (WF Runs)	+	96%	95%	78%	96%	96%	100%						
Community Engagement - EOS Support													
# of Articles / Stories published		228	167	168	98	120	89						
# of Surveys completed	+	0	0	0	1	0	0						
# of Giveaway show participants		90	69	119	188	177	99						
Business Development - Blockument													
Total Open Leads		181	209	278	326	368	440						
Projects in Commercials Discovery		96	108	130	163	182	210						
MoU Signed	+	4	4	5	6	7	8						
Demos / Prototypes in work		0	1	2	3	4	5						
Project SoWs Signed		0	0	0	0	0	0						
Projects deployed to Mainnet		0	0	0	0	0	0						

EOS Network Foundation

Review of Contracts, RFP and Grants status for week of 05 May 2023

Report Date: 05 MAY 2023

Status Scorecard			
Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

Contracts

- Siegel Search ICA fully executed
- Volt NDA fully executed

RFP
- N/A

Grants
- Batch 25 closed and sent to Committee to vote.
- Batch 24 approvals assigned in GitHub

Status Overview

Area	Document	Status	Notes
Contracts	Siegel Search	Done	
Contracts	Unity NDA	Writing Contract	
Contracts	Ennea NDA	Sent for Signature	
Contracts	Volt NDA	Done	

Upcoming Activities / In Progress

Contracts
- Contract Request Form

RFP
- N/A

Grants
- TrustEVM KYC
- Reviewing incoming Grants and sending for translation.
- Batch 25 closed
- Batch 26 opened

Issues / Risks / Escalations

- N/A

22

Completed Projects

(for reference only)

EOS Network Foundation

Project Start Date: 01 SEP 2022
Project Summary: BN256 library port from GoLang. GoLang Security Port, Port Go library to C++ for bn crypto library

Report Date: 28 APR 2023

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

December 2022
- M. Witherspoon reviewed outstanding PR
- HM. Huang completed final additional testing requested by ENF
- Issues completed and code merged:
  - Replace the implementation of bn256 host functions to use the new bn256 library
  - Add crypto primitive tests for invalid input lengths

January 2023
- All blockers resolved, code implemented and tests completed

February 2023
- HM. Huang has reviewed and implemented feedback provided in issue #11
- OCI and ENF to schedule a meeting to facilitate finalize code hand-off
- L. Huang, M. Witherspoon finalize code hand-off with HM. Huang
- All features have been merged into main for RC
- Antelope Leap v4.0.0 released

Key Milestones

Description	Planned	Act/*Est
Group & Implement GFP files (Port Golang to C++)	08 SEP 2022	08 SEP 2022
+Milestones Complete...		
Update benchmarking of new code vs. Go Library	15 OCT 2022	14 OCT 2022
Increase BN256 Perf. Statistics, Pull out boost libs used by bn256, Troubleshoot BigInt/Testing Issues for GoLang to C++ Converter	28 OCT 2022	27 OCT 2022
Use OCI's hand-rolled BigInt instead of Boost, Refactoring Cmake for all platforms & compilers	28 OCT 2022	09 NOV 2022
Replace the implementation of bn256 host functions to use the new bn256 library, Code Handoff to ENF	04 NOV 2022	21 FEB 2023
Code complete (release candidate)	01 APR 2023	20 MAR 2023
Code in production	01 APR 2023	25 APR 2023

Upcoming Activities / In Progress

- **COMPLETE**

Issues / Risks / Escalations

- None

Complete
In Progress
Backlog

ENFS-425 Golang Security Development

24

EOS Network Foundation

Project Start Date: 01 SEP 2022
Project Summary: Performance Harness will create an MVP, with the goal to complete this work in early 2023. Later phases will add more automation. Additional features and analysis capabilities, along with Cloud CI/CD

Note: Key milestone dates adjusted to Mar/Apr 2023 Release. Phase 1 & 2 included with Mar/Apr 2023 Release

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

March 2023
- Fix Usage of UserTrxDataFile with Performance Test
- Handle Exceptions occurring during runTest
- Create long-running test for performance_harness.py
- Performance Harness Code Review
- Coordinate TPS generation to direct traffic to specific node
- Merge Performance Harness Branch with Regression Testing Branch
- Release Fixes
- Fix bug- division by 0 andarg passing performance_test to performance_test_basic
- All v4.0 critical Phase 2 features are merged into main for RC
- Coordinate TPS generation to direct traffic to specific node

April 2023
- Re-examine use of logs for scraping data
- Final Phase 2 features complete, merged into main
- Antelope Leap v4.0.0 released

Key Milestones

Description	Planned	Act/*Est
MVP: Output Evaluation	30 APR 2023	26 OCT 2022
+Milestones Complete..		
Expand Transaction generator	01 MAR 2023	17 MAR 2023
Expand Run Harness Config Options	01 MAR 2023	17 MAR 2023
Multi-producer & "relay" or "canary" node config support	01 MAR 2023	17 MAR 2023
Include configurable "relay" nodes	01 MAR 2023	17 MAR 2023
Expand reporting to include multiple nodes	01 MAR 2023	17 MAR 2023
Begin Design Planning for migration to auto deployment	01 MAR 2023	17 MAR 2023
Code complete (release candidate)	01 APR 2023	06 APR 2023
Code in production	01 APR 2023	25 APR 2023

Upcoming Activities / In Progress

- **COMPLETE**

Issues / Risks / Escalations

- None

Complete
In Progress
Backlog

> ENFS-587 Perf Harness - Phase 2

> ENFS-319 Perf Harness MVP - Transaction Source
> ENFS-320 Perf Harness MVP - Run Harness
> ENFS-321 Perf Harness MVP - Output Evaluation
> ENFS-322 Perf Harness MVP - User Docs & Testing & Baseline Evaluation

Leap	**Parallelize Speculative Read-Only Trx Exec.**	ENF

EOS Network Foundation

Report Date: 28 APR 2023

Project Start Date: 30 NOV 2022
Project Summary: Leap is a C++ implementation of the Antelope protocol. It contains blockchain node software and supporting tools for developers and node operators. Parallelize Speculative Read-Only Transaction Execution

Link: https://github.com/AntelopeIO/leap

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

February 2023
- Organize operations into separate queues scheduled into two cycles completed
- Use thread pool to parallelize completed
- Develop parameterized timing model for cycles completed
- Recommend default timing parameters completed
- Initial PR put up for review for feedback

March 2023
- Finalized solution for EOS VM OC issue
- Received and implemented feedback from initial PR review
- Put up final PR for review
- Feedback received from last PR, comments addressed and integrated
- PR put up for final review
- Final feedback addressed, code merged into main for RC
- Antelope Leap v4.0.0 released

Key Milestones

Description	Planned	Act/*Est
Parallelize Speculative Read-Only Transaction Execution	14 FEB 2023	15 MAR 2023
Code complete (release candidate)	01 APR 2023	15 MAR 2023
Code in production	01 APR 2023	25 APR 2023

Upcoming Activities / In Progress

- **COMPLETE**

Issues / Risks / Escalations

- None