EOS Network
Foundation

Program and Operations
Health Report

03 FEB 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 + Components	Summary Details	Status Updates	Coding / Project kick-off	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.	Implementation in progress, code near 95% complete	In Progress				
3.2 Backport work	Remaining backport work completed in 3.2.	Work is complete	Complete	Complete	Complete	Complete	
3.3 SHiP Log Splitting, Block Log Splitting	State History Plugin logs and Block logs reformatted for improved storage and retrieval.	Blocklog and Ship Log Splitting currently waiting on peer review	In Progress	At Risk			
Leap 4.0 (new feature work, bugs)			In Progress				
CDT							
ANTLER Project Manager	A set of standards and programs for smart contract developers to build and maintain smart contract projects. Some initial components have been moved into next release	Package and Build Mgmt System merged together, name updated 03 FEB 2023	At Risk				
DUNE							
DUNE multi-versioning support	DUNE capable of upgrading itself and managing multiple versions of itself. Support for multiple versions of internal tooling.	Coding in complete, ready for peer review	Complete	In Progress			
Additional Components							
Performance Test Harness Phase 1	Performance harness designed to locally evaluate single node instances of a network.	Work is complete	Complete	Complete	Complete	Complete	
Performance Test Harness Phase 2	Performance harness designed to locally evaluate single node instances of a network.	Create report for per-transaction metrics	In Progress				
Regression Test Harness	A regression harness replacing eosio-launcher and improving overall flexibility.	Errors have all be resolved, all blockers cleared	In Progress				
BN256 library port from GoLang	Port of the bilinear group BN256 library in C++ to support EOS EVM performance requirements.	OCI ready to hand code over to ENF	Complete	At Risk			
Prometheus Exporter Plugin	New plugin to instrument nodeos for scraping data with Prometheus.	Rework data model to support new message based paradigm	In Progress				

Legend: In Progress (green) · At Risk (yellow) · Blocked (red) · Complete (blue)

Project Health Scorecard

Project	Headline	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ENF Projects													
GoLang Security Port	OCI & ENF to schedule a meeting to closeout	At Risk	At Risk										
Performance Test Harness	SPIKE: Investigate visualizing metric tools	Good	Good	Future	Future	Future							
Regression Test Harness	All issues resolved, all blockers cleared	Good	Good										
OCI Staff Augmentation	Rework Prometheus Architecture Document	Good	At Risk										Future →
Hypha - DAO	Milestone #3 review completed	At Risk	Good										
EOS EVM	Testnet stability and backup/restore testing	Issues	Issues	Future									
Leap Parallelize Speculative	Implementation near complete, testing	At Risk	Good	Future									
Antelope Projects (Coalition)													
Scalability+ IBC	IBC docs posted on GitHub for public access	At Risk	Good	Future	Future	Future	Future	Future	Future	Future	Future	Future	Future →
Scalability+ Instant Finality	Milestone #2 scope adjusted to incl. features	At Risk	At Risk	Future	Future	Future	Future	Future	Future	Future	Future	Future	Future →
Wallet+ SDKs	Wallet Plugin template library on Github	At Risk	At Risk	Future	Future	Future	Future	Future	Future	Future	Future		
Antler/CDT	Build System Cmake sprint completed	At Risk	At Risk										

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

RFP Status Report

RFP#	Project Name	Notes	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.	07 NOV	14 NOV	21 NOV	28 NOV	05 DEC	17 JAN	23 JAN
0009	RAM Limitation Fixes	Antelope Coalition has approved changes to new scope. It will not be issued through RFP.							
0010	Provable State Domains	Requirements for RFP in process							

Future	Good	At Risk	Issues	Complete

Meeting is not mandatory and will be decided if needed by the Coalition.

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: 03 FEB 2023

Status Scorecard

Schedule		☑	
Scope	☑		
Resources	☑		

Highlights & Accomplishments

December 2022
- L. Huang completed review, HM. Huang successfully integrated feedback
- 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
- OCI and ENF to schedule a meeting to facilitate finalize code hand-off

Key Milestones

Description	Planned	Act/*Est
Group & Implement GFP files (Port Golang to C++)	08 SEP 2022	08 SEP 2022
+Milestones - Complete...		
Create and Continued Updates to Initial Benchmarking	07 OCT 2022	09 NOV 2022
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	*14 FEB 2023
Code in production	01 APR 2023	*01 APR 2023

Upcoming Activities / In Progress

- L. Huang, S. Diesel to finalize code hand-off after HM. Huang returns 06 FEB 2023

Issues / Risks / Escalations

- OCI waiting on ENF final peer review to schedule code hand-off - *resolved*
- HM. Huang unavailable to meet with ENF to close out - *blocked*

Complete
In Progress
Backlog

> ⚡ ENFS-425 Golang Security Development

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. Stage 1 & 2 included with Mar/Apr 2023 Release

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

January 2023
- Create baseline evaluation of eos 2.0, 2.1 using Performance Harness
- Performance Harness Summary of 2.0-3.2
- Merge 'main' into 'feature_performance_harness_stage 2' branch-test fix from main
- Analyze & Report:
  - Number of complete production windows
  - Number of dropped translations
  - Number of dropped blocks during test on per node basis
- Create report for per-transaction metrics

February 2023
- SPIKE: Investigate Grafana (or similar tools) for visualizing metrics

Key Milestones

Description	Planned	Act/*Est
MVP: Output Evaluation	30 APR 2023	26 OCT 2022
+Milestones Complete..		
MVP: User Docs, Testing, Baseline Evaluation	23 DEC 2022	16 JAN 2023
Expand Transaction generator	01 MAR 2023	*01 MAR 2023
Expand Run Harness Config Options	01 MAR 2023	*01 MAR 2023
Multi-producer & "relay" or "canary" node config support	01 MAR 2023	*01 MAR 2023
Include configurable "relay" nodes	01 MAR 2023	*01 MAR 2023
Expand reporting to include multiple nodes	01 MAR 2023	*01 MAR 2023
Begin Design Planning for migration to auto deployment	01 MAR 2023	*01 MAR 2023
Code in production	01 APR 2023	*01 APR 2023

Upcoming Activities / In Progress

- Add support for eos-mechanics contract and transactions
- Transaction Generator - Support account creations transactions
- Transaction Generator - Expand user data trx json to support multiple transactions

Issues / Risks / Escalations

- Final details to be gathered for Performance Harness Stage 2 - *resolved*

Complete
In Progress
Backlog

> ⚡ ENFS-587 Perf Harness - Stage 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

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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

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

December 2022
- Remove usage of curl, substituting urllib.request
- M. Witherspoon provided comments indicating further research is require
- Convert filesystem usage from hard-coded'var/lib' to ctest test name
- executed the npm clean install and build required to update the Javascript

January 2023
- Add ability to specify nodeos path

February 2023
- Errors discovered with testing now resolved, all blockers cleared

Key Milestones

Description	Planned	Act/*Est
Replace/migrate eosio-launcher	01 MAR 2023	*01 MAR 2023
Improve Flexibility/Reliability	01 MAR 2023	*01 MAR 2023
Code in production	01 APR 2023	*01 APR 2023

Upcoming Activities / In Progress

- Migrate launcher: move nodeos process control fully into Node.py.
- Migrate launcher: port cluster bootstrap from sh
- SPIKE: Package regression test harness Python package into a Debian
- Support custom topologies
- Implement nodeos process control in launcher.py
- In Peer Review:
  - Reworking items in peer review, due to new test errors
  - Migrate Launcher - port cluster launcher
  - Convert network usage to use Linux namespace for isolation

Issues / Risks / Escalations

- Research and direction from Z. Buttler/M. Witherspoon to proceed - *resolved*
- Upcoming Activities currently blocked for ENF research - *resolved*
- Minification causing larger than expected minimal diff - *resolved*
- Reworking due to new test errors, details to follow - *resolved*

Complete
In Progress
Backlog

> ENFS-166 Regression Testing Enhancements

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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

January 2023
- Prometheus: Prototype proposed prometheus interface with other plugins
- 4.0: Test Contracts Source Files AND Propagate block after header validation
- 3.2: Test failure: nodeos_forked_chain_lr_test
- EVM: 1 second diff reported on explorer between EVM & Antelope block time testnet
- EVM: Still showing Mining reward 2 Ether in explorer
- EVM: Evaluate testnet error MDBX_NOTFOUND
- 4.0: Add handling of exceptions to naumed_thread_pool

February 2023
- 3.2: net_plugin handshake storm
- Prometheus: Rework Architecture Document to Reflect New Design
- EVM: Queue garbage collection of self-destructed accounts (per trx/minimal MVP)

Key Milestones

Description	Planned	Act/*Est
3.2 Backport work	14 SEP 2022	14 SEP 2022
3.1 / 3.2: WAX Updates	23 SEP 2022	23 SEP 2022
EVM	15 JAN 2023	*08 MAR 2023
Prometheus Exporter Plugin	01 MAR 2023	*01 MAR 2023
3.3 SHiP Log Splitting	01 MAR 2023	*01 MAR 2023
OpenSSL Dependency Removal	01 MAR 2023	*01 MAR 2023
3.3: Block Log Splitting	01 MAR 2023	*01 MAR 2023
Leap 4.0 (all new feature work and bugs)	01 MAR 2023	*01 MAR 2023

Issues / Risks / Escalations

- Staff Aug. task schedules may be impacted by other projects hierarchy - *approved*
- M. Witherspoon currently unable review 3.3 Blocklog Splitting PR:
  - Blocklog Splitting - *blocked*
  - Ship Log Splitting - *blocked*
  - Bring Ship protocol from abieos to Leap - *blocked*
- Kevin & Bart in discussions with ENF on how best to proceed with EVM - *resolved*
- Restructure Prometheus epic may impact to scope and schedule - *monitor*

Upcoming Activities / In Progress

- Prometheus: Stand up Prometheus Instance
- 4.0: Debug error messages are not self-explanatory
- M. Witherspoon to review 3.3 Blocklog Splitting PR
- In Peer Review:
  - 4.0: ~2x memory use when starting from snapshot w/ state history plugin enable
  - Prometheus: Rework data model to support new message based paradigm
  - 3.2: 'terminate-at-block' off by one in head mode
  - EVM: Use the same Execution Processor in EVM runtime contract & EVM node
  - 4.0: state_history_plugin_crashes under heavy load - main
  - 4.0: Add desc for debugger to named_thread_pool
- OCI to restructure Prometheus epic based on ENF feedback

Complete
In Progress
Backlog

> ⚡ ENFS-115 Leap 3.2

> ⚡ ENFS-460 Leap 4.0

> ⚡ ENFS-493 EVM

> ⚡ ENFS-510 Prometheus (Leap 4.0)

> ⚡ ENFS-641 SHiP & Block Log Splitting

> ⚡ ENFS-642 Open SSL Dependency Removal

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EOS Network Foundation

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

Report Date: 02 FEB 2023

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

January 2023
- EOS graph database production moved from AWS to cloud, installation complete
- Hypha shared recipe proposal with the EDEN team on Discord channel
- Proposal creation wizard calendar component design reverted, to be reviewed later
- Badge Backend and Frontend complete
- UpVote design specs started, Hypha meeting with EDEN and ENF to discuss
- Milestone #3 meeting with ENF, Smart Badges complete
- Milestone #3 documentation for graphQL/graphDB posted for review
- Hypha and EDEN discuss Milestone #4 implementation
- EOS graph database testing 90% complete

February 2023
- Technical specs for milestone #4 completed, implementation started
- UpVote design specs implementation after confirmation with Eden team
- ENF completed final docs and links review for milestone #3
- Additional edge cases identified, information added into milestone #4
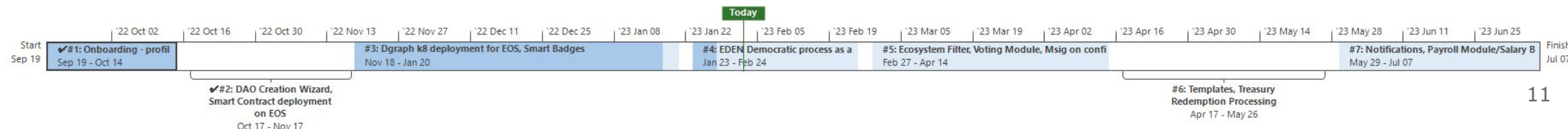
Key Milestones

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	*24 FEB 2023
#5 Ecosystem Filter, Voting Module (Config Page), Msig on config settings, Policy Proposals, Quest Proposals, Circle Proposals	14 APR 2023	*14 APR 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

- EDEN Democratic process frontend (upvote) 40% complete, backend 35% complete
- EDEN EOS deployment is 90% complete, planned deployment next week
- Community & core team membership separation for voting purposes (SC)
- Delegate and voter badges for election purposes (front end)
- Import EDEN election on EOS via EOS blockchain scan
- Configuration settings for community voting (classic and UpVote)
- UpVote election dashboard to show running election results
- UpVote DAO-spec. voting config. w/ N-level election, flexible duration, voice power

Issues / Risks / Escalations

- Front end beta deployment to EOS to include with Milestone #4 - *accepted*
- Conflict with EOS Costa Rica team to help validate Milestone #4 - *monitor*
- Hypha submitted additional questions for clarity around Milestone #4 - *resolved*
- J. Stroh to assume PM role from L. Herma in 2023 - *accepted*
- EDEN must approve recipe before implementing, schedule team meeting - *resolved*
- ENF limited availability to review Milestone #3 docs - *resolved*

Gantt chart timeline showing:
- Start Sep 19
- Today (Jan 22/23)
- ✔#1: Onboarding - profil Sep 19 - Oct 14
- ✔#2: DAO Creation Wizard, Smart Contract deployment on EOS Oct 17 - Nov 17
- #3: Dgraph k8 deployment for EOS, Smart Badges Nov 18 - Jan 20
- #4: EDEN Democratic process as a Jan 23 - Feb 24
- #5: Ecosystem Filter, Voting Module, Msig on confi Feb 27 - Apr 14
- #6: Templates, Treasury Redemption Processing Apr 17 - May 26
- #7: Notifications, Payroll Module/Salary B May 29 - Jul 07
- Finish Jul 07

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EOS EVM	**EOS EVM**	ENF

Report Date: 03 FEB 2023

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

January 2023
- Set-up 2nd sandbox environment, test and verify
- Fixes for gas usage consensus bug, forking issue, and threading issues
- Token compatibility PR put up
- Business decision to transition to an EOS VM model and simplify the token economy
- Faucet setup and new chain-ID config added (Testnet prerequisites)
- ENF announces changes to project: EOS EVM
- Deployment of Silkworm Testnet without Token Economy
- High availability deployed

February 2023
- Testnet stability and backup/restore testing
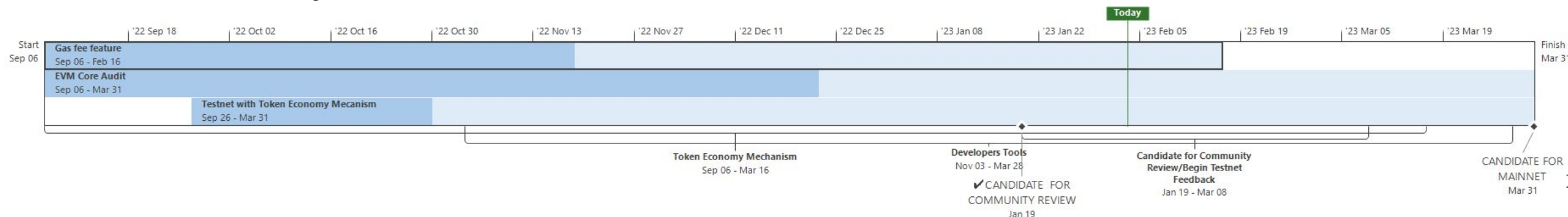- EOS deposit and withdraw capability

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	24 FEB 2023
Gas Fee Feature / Adjustable Base Gas Price	11 NOV 2022	13 FEB 2023
EVM Runtime Contracts Improvements	03 FEB 2024	13 FEB 2023
Additional Security Audit Review	23 DEC 2022	*MAR 2023
Candidate for Mainnet / Launch	08 MAR 2023	*APR 2023

Upcoming Activities / In Progress

- EVM runtime contract improvements
- Gas fee feature - Adjustable base gas price
- Bridging / Send EVM Action
- EOS EVM <> EOS frontend bridge

Issues / Risks / Escalations

- Change of token economy model will impact scope and schedule - *under review*
- Silkworm code maturity and stability may impact scope, schedule - *accepted*
- Non-EVM tasks generating schedule conflicts for EVM project - *monitor*

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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

December 2022
- Repaired cleos auto-launched keosd broken on main br. by newly introduced libcurl
- Test Harness crashes for a test simulating transaction failure repaired

January 2022
- New RPC endpoint send_read_only_transaction
- Finalize research, design work for proposal
- Meet with ENF team to review Parallelize design proposal for approach and research
- ENF team reached consensus on the design
- Final preparations to merge in the design docs to the product repo

February 2023
- Implementation near complete, code 95%
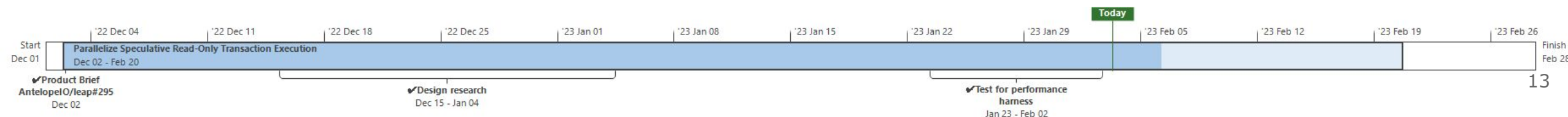- Run additional tests to identify threading issues

Key Milestones

Description	Planned	Act/*Est
Parallelize Speculative Read-Only Transaction Execution	14 FEB 2023	*20 FEB 2023

Upcoming Activities / In Progress

- Timer to abort long running transactions
- Organize operations into separate queues scheduled into two cycles
- Use thread pool to parallelize
- Develop parameterized timing model for cycles
- Recommend default timing parameters

Issues / Risks / Escalations

- PTO time off during holidays have potential to impact project schedule - *resolved*
- ENF review may impact project scope prior to implement - *resolved*

Start Dec 01 — Parallelize Speculative Read-Only Transaction Execution — Dec 02 - Feb 20 — Today — Finish Feb 28

✔Product Brief AntelopeIO/leap#295 Dec 02

✔Design research Dec 15 - Jan 04

✔Test for performance harness Jan 23 - Feb 02

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IBC (inter blockchain communication)

Report Date: 01 FEB 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)

Status Scorecard

Schedule	✅		
Scope	✅		
Resources	✅		

Highlights & Accomplishments

January 2023
- First IBC transaction successfully completed between EOS and UX
- Documentation prepared for IBC launch
- G. Babin set-up MSIGs for BPs to prepare for IBC deployment
- All chains executed MSIGs
- Tentative launch set 27 JAN for EOS, UX and TLOS
- G. Babin activates IBC after BPs execute MSIGs
- Successfully deployed on EOS, UX and TLOS
- Control over contracts has been relinquished to the BPs of each chain
- Marketing announcements on social media to update the community

February 2023
- Marketing announcements and Podcasts to announce IBC launch
- IBC documentation available on https://antelopeibc.io/
- G. Babin to submit upcoming milestone improved dates for approval to Coalition
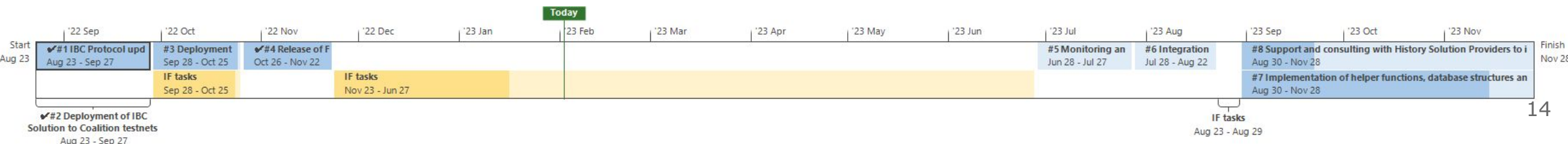
Key Milestones

Description	Planned	Act/*Est
#1 IBC Protocol updates	27 SEP 2022	03 NOV 2022
#2 Deployment IBC Solution to Jungle, Kylin testnet (+Wax, TLOS, UX)	27 SEP 2022	27 SEP 2022
#3 Deployment IBC solution to EOS, TLOS, WAX, UX	25 OCT 2022	02 FEB 2023
#4 Release of Firehose + proof API server bundle	22 NOV 2022	15 DEC 2022
#5 Monitoring and analysis tools	27 JUL 2023	*27 JUL 2023
#6 Integration of IBC and Instant Finality	22 AUG 2023	*22 AUG 2023
#7 Imp. of helper functions, database structures and API for proof generation ~~in Nodeos~~ (G. Babin)	28 NOV 2023	*28 NOV 2023
#8 Support & consult with History Solution Providers to improve proof APIs	28 NOV 2023	*28 NOV 2023

Upcoming Activities / In Progress

- Add support for SHIP, milestone #8 in progress
- ENF Marketing starting on podcast and blog posts for upcoming IBC announcements
- Z. Gall to support Origin on public zoom call with interested developers
- G. Babin publish code to open-source for public access
- Milestone #5, Monitoring and analysis tools to start

Issues / Risks / Escalations

- Discuss with Coalition regarding launch and governance implications - *resolved*
- Additional work requested by Coalition prior to deployment - *accepted*
- A. Hayrapetian currently unavailable for project requirements - *resolved*
- Milestone #3 estimate did not factor durations for BPs to deploy - *monitor*
- WAX unable to deploy IBC without upgrading Antelope - *accepted*

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Report Date: 01 FEB 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

December 2022
- Hybrid build system supporting both Chia and Relic
- Redaction of consensus paper
- Pseudo-code and math proofs completed, submitted to A. Hayrapetian for review

January 2023
- Finalize definition of algorithm, preparation for implementation
- Aggregate signatures PR submitted, awaiting review

February 2023
- Milestone #2 scope adjusted to include:
  - Addition, multiplication and exponentiation pairing-based cryptography primitives
  - changes to the Aggregate signatures PR
- G. Babin to submit date change requests to Coalition for approval, re: scope change
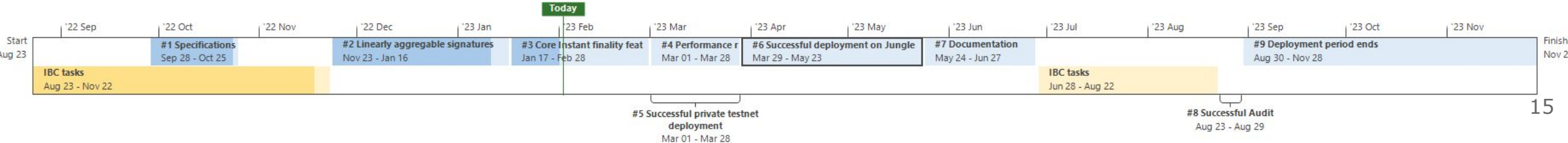
Key Milestones

Description	Planned	Act/*Est
#1 Specifications, test definitions, mathematical proofs, latency analysis	25 OCT 2022	*28 FEB 2022
#2 Linearly aggregable signatures	15 JAN 2023	*28 FEB 2023
#3 Core Instant finality features	28 FEB 2023	*28 FEB 2023
#4 Performance review, #5 Successful private testnet deployment	28 MAR 2023	*28 MAR 2023
#6 Successful deployment on Jungle public testnet	23 MAY 2023	*23 MAY 2023
#7 Documentation	27 JUN 2023	*27 JUN 2023
#8 Successful Audit	29 AUG 2023	*29 AUG 2023
#9 Deployment period ends	28 NOV 2023	*28 NOV 2023

Upcoming Activities / In Progress

- HotStuff consensus mech. as base consensus algorithm near completion
- Approval of mathematical proofs
- A. Hayrapetian to review pseudo-code, provide feedback

Issues / Risks / Escalations

- Uncertain timing on Origin core dev onboard workshops from ENF/OCI - *accepted*
- Additional features added may push back 15 JAN 2023 milestone - *monitor*
- A. Hayrapetian currently unavailable for project requirements - *monitor*
- Origin staffing time-off will have minor impact to scheduling - *resolved*

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Report Date: 03 FEB 2023

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

January 2023
- Alpha version of Account Kit implementation within Session Kit
- Community feedback indicates need for milestone reprioritization
- Session Kit 0.2.0 published to Github
- Resource Provider and cosigner plugins published to Github
- Milestones/Budget v4 presented to Coalition for approval
- Milestones/Budget v4 approved by Coalition
- First optimisation pass against Account Kit and improving tests
- Account Kit balances abstraction implemented
- First prototypes of Session Kit + web-ui-renderer

February 2023
- Account Kit balances abstraction implementation ready for review
- Interfaces between web-ui-renderer and Session Kit
- Modal UI template library and release based on web-ui-renderer on GitHub
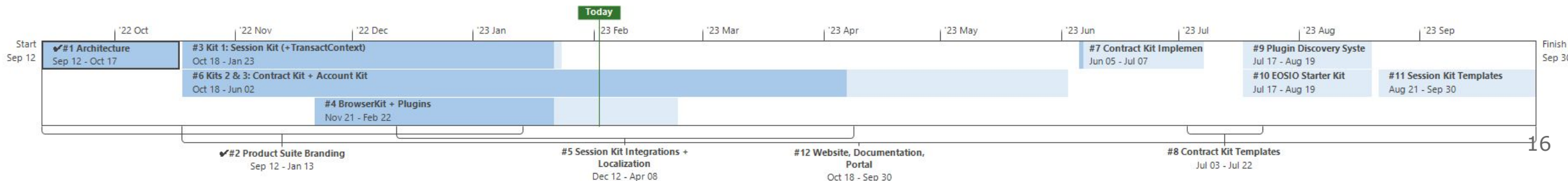- Wallet Plugin template library released on Github

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	*09 FEB 2023
#4 Browser Kit + Plugins	22 FEB 2023	*22 FEB 2023
#5 Session Kit Integrations + Localization	08 APR 2023	*08 APR 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

- Session Kit 0.3.x development (focus on UI components)
- Design of UI elements for @wharfkit/web-ui-renderer
- Development of first wallet plugin(s) for Session Kit
- Release of first demo to showcase functionality of UI components
- Development of a console-based UI renderer for development

Issues / Risks / Escalations

- Milestone #3 schedule past due, deliverables still in progress - *accepted*
- Discussion around resequencing milestones, no impact to scope - *accepted*
- Sessions Kit, Milestone #3 currently blocked by non-Wharf SDKs issues - *resolved*
- Coalition decision on prioritizing v4 deliverables may impact schedule - *resolved*
- v4 deliverables reprioritization approved by Coalition - *resolved*

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Contract Development Toolkit (CDT)

Report Date: 02 FEB 2023

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

Status Scorecard

Schedule		☑	
Scope	☑		
Resources	☑		

Highlights & Accomplishments

January 2023
- CDT Debugging Framework load shared object and load web assembly SC
- DUNE auto-upgrade packaging completed
- DUNE auto-upgrade Add command line option for update
- Proj. Mgmt Sys. (antler-pack) Dependency Mgmt Implement Dependency handling
- Homebrew package for DUNE created, final DUNE package
- Add command line option for dynamic updates
- All DUNE features complete for Release
- Build Sys. Initial tool creation
- Build Sys. Use package C++ wrapper to parse package files complete
- Create example plugin extension

February 2023
- Implement retrieval of dependencies
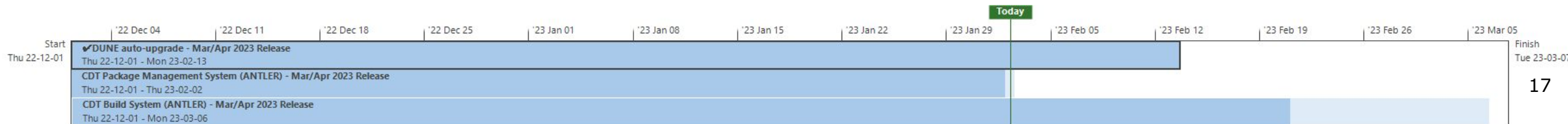- Build System Cmake sprint completed

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	*01 FEB 2023
CDT Build System (ANTLER)	23 FEB 2023	*28 FEB 2023

Upcoming Activities / In Progress

- Implement Cmake from project file nearing completion
- Build System Documentation and Polish added to Build System scope
- ENF CDT build system and package system code review in progress

Issues / Risks / Escalations

- Competing resources and aggressive schedule for 2023 Mar/Apr Release - *monitor*
- Staff availability limited during PTO, potential impact to schedule - *accepted*
- In Depth knowledge of technologies required, training & support - *resolved*
- Ukraine war with Russia affecting developers within conflict region - *monitor*
- De-scope of add'l features to keep within 2023 Mar/Apr release - *accepted*
- CDT Debugging Framework to be rescheduled after next release - *accepted*

Today	
'22 Dec 04	'22 Dec 11	'22 Dec 18	'22 Dec 25	'23 Jan 01	'23 Jan 08	'23 Jan 15	'23 Jan 22	'23 Jan 29	'23 Feb 05	'23 Feb 12	'23 Feb 19	'23 Feb 26	'23 Mar 05

Start Thu 22-12-01

✔DUNE auto-upgrade - Mar/Apr 2023 Release
Thu 22-12-01 - Mon 23-02-13

CDT Package Management System (ANTLER) - Mar/Apr 2023 Release
Thu 22-12-01 - Thu 23-02-02

CDT Build System (ANTLER) - Mar/Apr 2023 Release
Thu 22-12-01 - Mon 23-03-06

Finish Tue 23-03-07

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Operations Metrics

Operations Scorecard (Rolling 12 months)

Area / Metrics	Link	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Market Funding													
Direct Grants Fully Approved (#)		2	2	0	0	1	0	0					
Direct Grants Fully Approved ($)		$55,000	$39,416	$0	$0	$10,000	$0	$0					
Direct Grants Rejected (#)	＋	5	2	7	1	7	2	0					
Direct Grants Rejected ($)		$218,000	$54,000	$782,000	$50,000	$1,093,785	$50,000	$0					
Direct Grants Processing Time (days)		101	66	109	146	88	74	0					
Antelope Regression Metrics													
First Pass Yield (WF Runs)	＋	84%	77%	82%	96%	95%	78%	100%					

Contracts / RFP / Grants

Review of Contracts, RFP and Grants status for week of 06 FEB 2023

EOS Network Foundation

Highlights & Accomplishments

Contracts
- Market Across ICA fully executed
- FD Blockchain ICA fully executed
- Aon Agreement fully executed
- Graphic Mint ICA fully executed

RFP
- RFP#0011 awarded Bid

Grants
- N/A

Status Overview

Area	Document	Status	Notes
Contracts	Market Across ICA	Done	
Contracts	Zaisan Addendum	Work in Progress	Pending Patty confirmation to submit addendum for signature.
Contracts	FD Blockchain ICA	Done	
Contracts	EOS Support Inc ICA	Work In Progress	Pending Ted approval of Pro-Rata clause.

Upcoming Activities / In Progress

Contracts
- FunDay Contract

RFP
- RAM Limitation updates

Grants
- Pending 2 Ideathon Hackathon winners KYC confirmation.

Issues / Risks / Escalations

- N/A