



**EOS Network  
Foundation**

# **Program and Operations Health Report**

**03 MAR 2023**

# Agenda

Section	Description
1	<a href="#"><u>New Initiatives</u></a>
2	<a href="#"><u>Operations Metrics</u></a>
3	<a href="#"><u>Contracts, RFPs, Grants Metrics</u></a>
4	<a href="#"><u>Completed Projects</u></a>

The background of the slide is a complex, abstract geometric pattern. It consists of numerous thin, light blue lines that intersect to form a network of triangles and other polygons. Some of these shapes are filled with a semi-transparent blue color, creating a layered, crystalline effect. The overall composition is dynamic and modern, with a color palette dominated by various shades of blue on a white background.

# **New Initiatives**

# March/April 2023 Release

Report: 03 MAR 2023

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.				✓				
3.2 Backport work	Remaining backport work completed in 3.2.	Work is complete	Complete	✓	✓	✓	✓	✓	✓
Lighter Validation for Relays	Optimization of block propagation from relay nodes that match certain configured criteria		Complete	✓	✓	✓	✓	✓	✓
Auto-peer with next/previous BP	Optimization of BP peering to ensure most proximal production peers are connected			✓	✓				
Programmable Future Snapshots	Ability to schedule and unschedule future snapshots			✓	✓				
Multithread SHiP	Moving State History Plugin off the main thread for improved performance		Complete	✓	✓	✓	✓	✓	✓
SHiP Log Splitting, Block Log Splitting	State History Plugin logs and Block logs reformatted for improved storage and retrieval.	Block log splitting is merged, Merge of SHiP stability fix	Complete	✓	✓	✓	✓	✓	✓
Leap 4.0 (new feature work, bugs)		Blocked by surprising 'http-max-response-time-ms' deadline on setcode							
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	Additional bugs discovered during PR review, repair in progress		✓					
DUNE									
DUNE multi-versioning support	DUNE capable of upgrading itself and managing multiple versions of itself. Support for multiple versions of internal tooling.	Work is complete	Complete	✓	✓	✓	✓	✓	✓
Additional Components									
Performance Test Harness Stage 1	Performance harness designed to locally evaluate single node instances of a network.	Work is complete	Complete	✓	✓	✓	✓	✓	✓
Performance Test Harness Stage 2	Transaction generator improvements including configuring transaction type	Merging into main is live and ready for review, docs updated							
Regression Test Harness	A regression harness replacing eosio-launcher and improving overall flexibility.	Completing regression test, final PR to put up for review							
BN256 library	C++ port of the bilinear group BN256 Go library to support EOS EVM performance requirements.	Code has been merged	Complete	✓	✓	✓	✓	✓	✓
Prometheus Exporter Plugin	New plugin to instrument nodeos for scraping data with Prometheus.	Addressing final PR comments, adding integration test		✓					

# Project Health Scorecard

Project	Headline	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>ENF Projects</b>													
GoLang Security Port	COMPLETE	>>	>>										
Performance Test Harness	PR description curation & doc updates	>>	>>	>>									
Regression Test Harness	Enable protocol features in integration tests	>>	>>	>>									
OCI Staff Augmentation	3.3 SHiP Log and Block log splitting complete	>>	>>	>>									
Hypha - DAO	Milestone #4 Upvote election presentation	>>	>>	>>									
EOS EVM	ENF, EVM MSIG accounts created	>>	>>	>>									
Leap Parallelize Speculative	Final PR put up for review	>>	>>	>>									
Hubspot	ENF, HubSpot cust. support rep meeting		>>	>>									
P2P Peer Discovery	Detailed schedule and WBS created		>>	>>									
<b>Antelope Projects (Coalition)</b>													
Scalability+ IBC	Milestone #7, #8 completed, under review	>>	>>	>>									
Scalability+ Instant Finality	Linearly aggregable signatures ready for PR	>>	>>	>>									
Wallet+ SDKs	Web UI renderer and plugins localization v1	>>	>>	>>									
Antler/CDT	Addn'l bugs discovered with 2nd PR review	>>	>>	>>									
Coalition Ledger App	Drft. schedule presented at Coalition meeting		>>	>>									

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

Antelope Upgrade

Performance Test Harness

OCI

**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

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule		✓	
Scope	✓		
Resources	✓		

### Highlights & Accomplishments

- February 2023**
  - Add support for eos-mechanics contract and transactions
  - Performance\_test\_base-runTest Function completed Run to be set properly
  - Capture and log/report raw command line input to Performance Harness
  - Discussion on EVM Support in Performance Harness completed, no action required
- March 2023**
  - Update calc-\*-thread handling in perf test to start at plugin default thread count
  - Fix usage of userTrxDataDile with Performance Test
  - Handle exceptions occurring during runTest
  - Implement Nodeos Args to expose on CLI for performance\_test\_basic
  - Performance Harness Staging 3 Proposal Review
  - Performance Harness Stage 2 - PR Description Curation
  - Performance Harness Stage 2 Documentation Updates

### Upcoming Activities / In Progress

- Coordinate TPS generation to direct traffic to specific node
- Release Fixes: Performance Harness
- In Peer Review:
  - Update Log Reader Tests to Account for New Version Checks

Complete

In Progress

Backlog

ENFS-587

Perf Harness - Stage 2

Key Milestones		
Description	Planned	Act/*Est
MVP: Output Evaluation	30 APR 2023	26 OCT 2022
<b>+Milestones Complete..</b>		
MVP: User Docs, Testing, Baseline Evaluation	23 DEC 2022	16 JAN 2023
Expand Transaction generator	01 MAR 2023	*08 MAR 2023
Expand Run Harness Config Options	01 MAR 2023	*08 MAR 2023
Multi-producer & "relay" or "canary" node config support	01 MAR 2023	*08 MAR 2023
Include configurable "relay" nodes	01 MAR 2023	*08 MAR 2023
Expand reporting to include multiple nodes	01 MAR 2023	*08 MAR 2023
Begin Design Planning for migration to auto deployment	01 MAR 2023	*08 MAR 2023
Code in production	01 APR 2023	*01 APR 2023

### Issues / Risks / Escalations

- Limited ENF staff availability causing delaying in peer reviews - *accepted*
- Adj. to final code freeze date impacting milestone completion date - *monitor*

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

Antelope Upgrade

Regression Test Harness

OCI

**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

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule		✓	
Scope	✓		
Resources	✓		

### Highlights & Accomplishments

- February 2023**
  - Add support for custom topologies to launcher.py
  - Debug test failures
  - Implement support for unstarted nodes in launcher.py
  - Detection of unstarted nodes failing complete
  - Support more than 26 producers names in launcher.py
- March 2023**
  - Enable heterogeneous clusters
  - Migrate launcher: port cluster bootstrap from sh
  - Migrate Launcher - port cluster launcher
  - Convert network usage to use Linux namespace for isolation
  - Port logging level and logging level map arguments
  - Enable protocol features in integration tests in dependency order
  - Fix defaults updates to performance\_tests committed in error
  - Some tasks moved back to in progress after achieving soft code freeze

Key Milestones		
Description	Planned	Act/*Est
Replace/migrate eosio-launcher	01 MAR 2023	*08 MAR 2023
Improve Flexibility/Reliability	01 MAR 2023	*08 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
- Implement nodeos process control in launcher.py

### Issues / Risks / Escalations

- Adj. to final code freeze date impacting milestone completion date - *monitor*




**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**

<b>Schedule</b>			
<b>Scope</b>			
<b>Resources</b>			

**Highlights & Accomplishments**

**March 2023**

- 4.0: get-table\_by+scope returns a "more" value on eosio account
- 4.0: surprising 'http-max-response-time-ms' deadline on setcode
- 4.0: TestHarness: self.cmd is not kept up to date with relaunch
- 4.0: ~2x memory use when starting from snapshot w/ state history plugin enable
- 4.0: state\_history\_plugin\_crashes under heavy load
- 4.0: refactor thread and asio usage in state history plugin
- 4.0: make it difficult to accidentally perform a large rollback of state history logs
- 4.0: Move initialization of logging before plugin\_initialize
- 4.0: Test Failure: trx-finality\_status\_forked\_test
- 4.0: make it difficult to accidentally perform a large rollback of state history logs.
- 4.0: log level not honoring logging.json settings on startup
- 4.0: Surprising 'http-max-response-time-ms' deadline on setcode
- 4.0: Gelf logging should use its own io\_context
- 3.3 SHiP Log and Block log splitting

**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	* MAR 2023
Prometheus Exporter Plugin	01 MAR 2023	*08 MAR 2023
3.3 SHiP Log Splitting	01 MAR 2023	03 MAR 2023
<del>OpenSSL Dependency (removed per ENF)</del>	<del>01 MAR 2023</del>	<del>*01 MAR 2023</del>
3.3: Block Log Splitting	01 MAR 2023	03 MAR 2023
Leap 4.0 (all new feature work and bugs)	01 MAR 2023	*08 MAR 2023

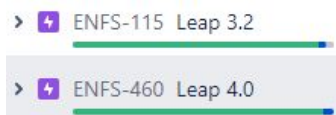
**Upcoming Activities / In Progress**

- 4.0: Add TestHarness python integration scripts to dev package
- 3.2: Implement an addn'l strikes-rule for a greater timeframe
- 3.2: Transaction\_success\_tracing and transaction\_failure\_tracing debug
- EVM: Create integration test for EOS/EVM bridge
- Prometheus: Config. opts to the Prometheus plugin, deadline to metrics call
- Prometheus: Write script for setting up nodeos cluster for Prometheus to query
- In Peer Review:
  - Prometheus: Merge Prometheus Feature Branch into Main
  - 4.0: Nodeos option to auto-peer based on BP schedule
  - EVM: Create integration test for EOS/EVM bridge

Complete 

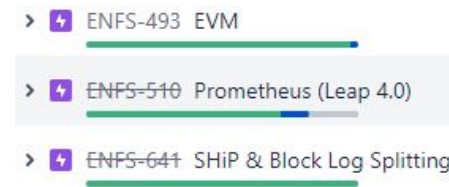
In Progress 

Backlog 



**Issues / Risks / Escalations**

- 4.0 surprising 'http-max-response-time-ms' deadline on setcode - **resolved**
- ENF to clear backlog of peer reviews - **monitor**
- Staff changes at OCI, Prometheus feature to be reassigned - **accepted**












**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**

<b>Schedule</b>			
<b>Scope</b>			
<b>Resources</b>			

**Highlights & Accomplishments**

**February 2023**

- Community & core team membership separation for voting purposes (SC)
- Review of Milestone #3 completed
- Milestone #4 review scheduled for 02 MAR 2023
- Configuration settings for community voting (classic and UpVote)
- Front end UI functioning, icons working
- Delegate and voter badges for election purposes (front end)
- UpVote DAO-spec. voting config. w/ N-level election, flexible duration, voice power
- Members Page: Upvote Delegate result widget

**March 2023**

- Import of election to backend, full integration of backend with frontend
- UpVote election dashboard to shows running election results
- Milestone #4 presented to ENF team, Upvote election in review

**Key Milestones**

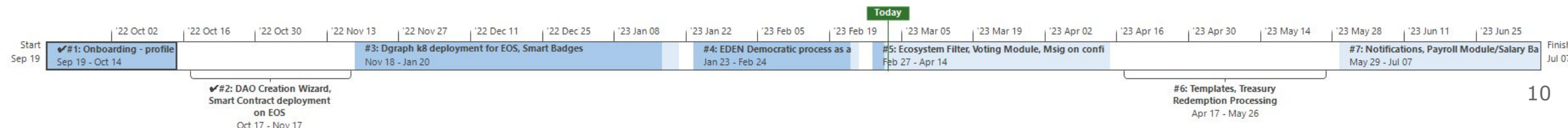
Description	Planned	Act/*Est
#1: Onboarding - profile service deploy for EOS, Mobile Version, Pricing Model +Freemium, staking and burning	14 OCT 2022	13 OCT 2022
#2: DAO Creation Wizard, Smart Contracts deploy on EOS	25 NOV 2022	17 NOV 2022
#3: Dgraph k8 deployment for EOS, Smart Badges	20 JAN 2023	03 FEB 2023
#4: EDEN Democratic process as a governance setting	24 FEB 2023	*09 MAR 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**

- Import EDEN election on EOS via EOS blockchain scan
- EOS deployment soft launch, commercial launch marketing communications
- Complete graphql migration for EOS deployment technical deployment
- Schedule additional meeting for additional EDEN election voting demonstration

**Issues / Risks / Escalations**

- Conflict with EOS Costa Rica team to help validate Milestone #4 - **monitor**
- EOS deployment technical deployment issue with queries - **monitor**
- Hypha onboarding new scrum project manager to support team - **accepted**
- Using free edition dFuse limits trx to 2 documents/sec - **monitor**



EOS EVM	EOS EVM	ENF
<b>Project Start Date:</b> September 2022 (new baseline) / January 2023 (new MVP scope) <b>Project Summary:</b> 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 <b>NOTE:</b> Planned dates updated to reflect holiday and PTO schedules / MVP scope amended		

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule	<div></div>	<div></div>	<div>✓</div>
Scope	<div></div>	<div></div>	<div>✓</div>
Resources	<div></div>	<div>✓</div>	<div></div>

## Highlights & Accomplishments

- February 2023**
- Testnet stability and backup/restore testing
  - EOS deposit and withdraw capability
  - Use the same Execution Processor in EVM runtime contract and EVM node
  - Queue garbage collection of self-destructed contract accounts
  - FrontEnd bridge requirements and specs, and design mock-up
  - MSIG draft for account creation
  - Silkworm Testnet debugging
- March 2023**
- MSIG account creation for ENF & EVM accounts
  - Vendor engaged for Frontend bridge design and development

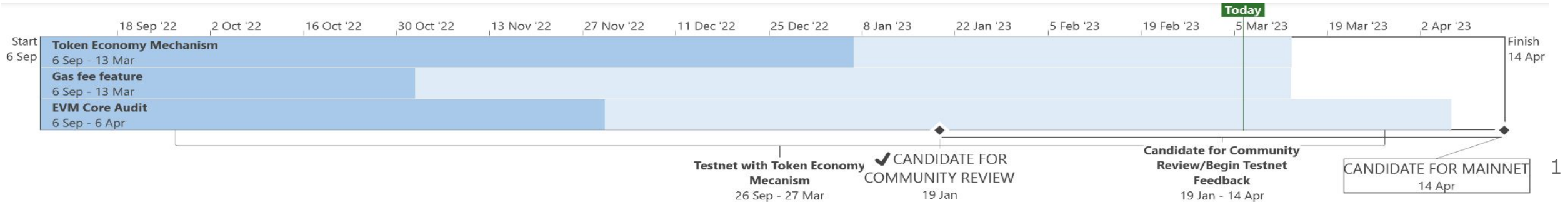
## Upcoming Activities / In Progress

- Fix remaining failing Ethereum consensus test
- Gas fee feature - Adjustable base gas price
- Bridging (EOS to EVM basic and EVM to EOS basic)
- UI for frontend trustless bridge

Key Milestones		
Description	Planned	Act/*Est
API Compatibility	22 NOV 2022	15 NOV 2022
<b>+Milestones - Complete...</b>		
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	*10 MAR 2023
Gas Fee Feature / Adjustable Base Gas Price	11 NOV 2022	*10 MAR 2023
EVM Runtime Contracts Improvements	03 FEB 2024	10 FEB 2023
Additional Security Audit Review	23 DEC 2022	*31 MAR 2023
Candidate for Mainnet / Launch	08 MAR 2023	*14 APR 2023

## 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**



Leap

Parallelize Speculative Read-Only Trx Exec.

ENF

**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>

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule		✓	
Scope	✓		
Resources	✓		

## Highlights & Accomplishments

### February 2023

- Implementation near complete, code 95%
- Run additional tests to identify threading issues
- Finalize code and tests for review completed
- Timer to abort long running transactions completed
- 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

## Key Milestones

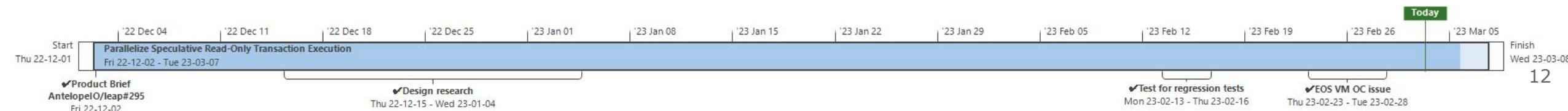
Description	Planned	Act/*Est
Parallelize Speculative Read-Only Transaction Execution	14 FEB 2023	*08 MAR 2023

## Upcoming Activities / In Progress

- Waiting for feedback from final PR to complete

## 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**
- Final completion date adjusted for EOS VM OC issues + bug repairs - **resolved**



HubSpot

ENF

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.

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule	✓		
Scope	✓		
Resources	✓		

Highlights & Accomplishments

- February 2023
- Project milestones identified, stakeholder lists created for two instances
  - Project schedule created, key milestone dates planned
  - Defining project scope of work, milestones deliverables and timelines
  - Project schedule + timeline for tracking created
  - First requirements gathering session with Communications team
  - ENF internal comparison of two HubSpot instances completed
- March 2023
- Meeting with outside Marketing automation vendors to discuss support options
  - Meeting with HubSpot customer support team to discuss two instances
  - Executive sponsors review, approved schedule and timeline proposal

Key Milestones		
Description	Planned	Act/*Est
#1 Scope Definition, Milestone List, Stakeholder Registry, HubSpot vendor discussion	17 FEB 2023	17 FEB 2023
#2 Project Schedule	22 FEB 2023	22 FEB 2023
#3 Instances review and comparison	24 FEB 2023	24 FEB 2023
#4 DUD vendor website impact	02 MAR 2023	*13 MAR 2023
#5 Review user-level access, permissions, user emails	03 MAR 2023	*03 MAR 2023
#6 Dashboard setup and configuration	10 MAR 2023	*10 MAR 2023
#7 Stakeholder Requirements, Unify instances	14 MAR 2023	*14 MAR 2023
#8 Instance coding	15 MAR 2023	*15 MAR 2023
#9 HubSpot reporting	17 MAR 2023	*17 MAR 2023
#10 Document Processes, Process Metrics	03 APR 2023	*03 APR 2023

Upcoming Activities / In Progress

- Marketing Automation vendor to discuss setup with ENF
- Meeting with DUD vendor to discuss impact to ENF website
- Review ENF user-level accesses, permissions, correct user emails for accounts

Issues / Risks / Escalations

- Billing cycles for two instances to be reviewed - *resolved*



FD Blockchain Lab

**P2P Peer Discovery**

ENF

**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.

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule	✓		
Scope	✓		
Resources	✓		

### Highlights & Accomplishments

- February 2023**
  - 8-Feb: Project kick-off with ENF and FD Blockchain Lab teams
  - 14-Feb: Payment of first milestone for contract execution
  - 20-Feb: The Fudan project team officially launched their working group
- March 2023**
  - 1-Mar: Setup of Local Gitlab (project configuration, CI/CD) and Local environment
  - 2-Mar: Confirmation of initial requirements re. genesis.json information and mapping of aliases to chainIds
  - 6-Mar: Detailed schedule and work breakdown structure

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	*29 MAR 2023
Custom Chain Id	10 MAR 2023	*10 MAR 2023
Alias Configuration	17 MAR 2023	*17 MAR 2023
Peer Refreshing	24 MAR 2023	*24 MAR 2023
Nodes Setting	29 MAR 2023	*29 MAR 2023
Automated Testing	12 APR 2023	*12 APR 2023
Testing and delivery	22 MAY 2023	*22 MAY 2023
Maintenance and support	20 AUG 2023	*20 AUG 2023

### Upcoming Activities / In Progress

- Custom Chain Id and Alias Configuration
- Project documentation: draft of product brief, architecture diagram and technical specifications

### Issues / Risks / Escalations

- Detailed architecture diagram and technical specs will be documented after an initial round of development - *monitor*







Scalability+	IBC (inter blockchain communication)	Origin
<b>Project Start Date:</b> 23 AUG 2022 <b>Project Summary:</b> 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). <b>SLA Period:</b> 24 months (end 27 AUG 2024)		

Report Date: 01 MAR 2023			
Status Scorecard			
Schedule	✓		
Scope	✓		
Resources	✓		

## Highlights & Accomplishments

- February 2023**
- IBC documentation available on <https://antelopeibc.io/>
  - Coalition approved accelerated dates for Milestones #7
  - IBC code now open-sourced and published <https://github.com/cryptomechanics>
  - First prototype of Monitoring Tools API completed
  - Coalition approves Milestone #7 to remove 'in Nodeos' adjustment
  - Milestone #7 complete, in review by EOS USA, TLOS
  - Milestone #5, Monitoring and analysis tools, first stage completed
- March 2023**
- Discussed with Coalition the last stage of Milestone #5, alert mechanism
  - Additional definition added to Milestone #8 to specify APIs
  - Additional definition added to Milestone #5 to specify monitor & analysis tools
  - Coalition meeting 02 MAR 2023 approved proposed IBC milestone changes
  - Milestone #8 Firehose and State History Plugin completed, in review by EOS USA

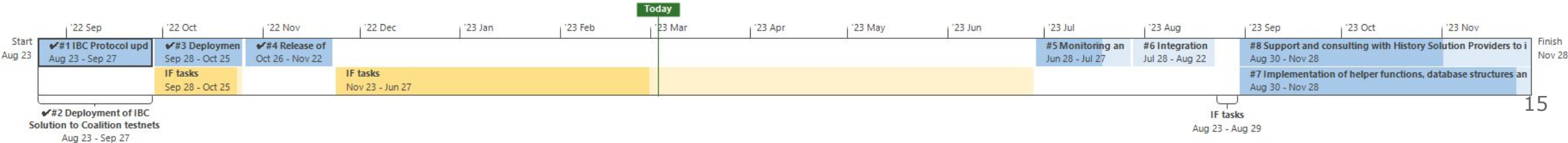
Key Milestones		
Description	Planned	Act/*Est
#1 IBC Protocol updates	27 SEP 2022	03 NOV 2022
+Milestones Complete..		
#4 Release of Firehose + proof API server bundle	22 NOV 2022	15 DEC 2022
#5 Monitoring and analysis tools: <a href="#">API to monitor contracts on+alert mechanism</a> (Coalition approved change)	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 <del>in Nodeos</del> (Coalition approved change)	28 NOV 2023	*28 NOV 2023
#8 Support & consult w/ History Solution Providers to improve proof APIs: <a href="#">Firehose</a> , <a href="#">State History Plugin</a> , <a href="#">TraceAPI</a> (Coalition approved change)	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 Technical AMA call with interested developers

## Issues / Risks / Escalations

- Additional work requested by Coalition prior to deployment - **accepted**
- WAX unable to deploy IBC without upgrading Antelope - **accepted**





Scalability+	IF (Instant Finality)	Origin
<b>Project Start Date:</b> 23 AUG 2022 <b>Project Summary:</b> Instant Finality implements near-immediate byzantine fault-tolerant deterministic finality as part of the core EOSIO protocol in order to improve responsiveness of application <b>SLA Period:</b> 24 months (end 27 AUG 2024)		

Report Date: 01 MAR 2023			
Status Scorecard			
Schedule			✓
Scope		✓	
Resources	✓		

## Highlights & Accomplishments

### February 2023

- G. Babin to submit date change requests to Coalition for approval:
  - Change request to re-baseline deliverables to accommodate scope change
  - Changes approved
- A. Hayrapetian reviewed pseudo-code, provided feedback
- Milestone #2 changes nearing completion
- Milestone #2 PR put up, feedback to expand on scope by Coalition
- Proposal for Milestone #2 redefine approved
- Coalition approved adjustments and dates to active milestones
- Milestone #1 completed, submitted to ENF for review

### March 2023

- Milestone #2 Linearly aggregable signatures ready for PR

## Key Milestones

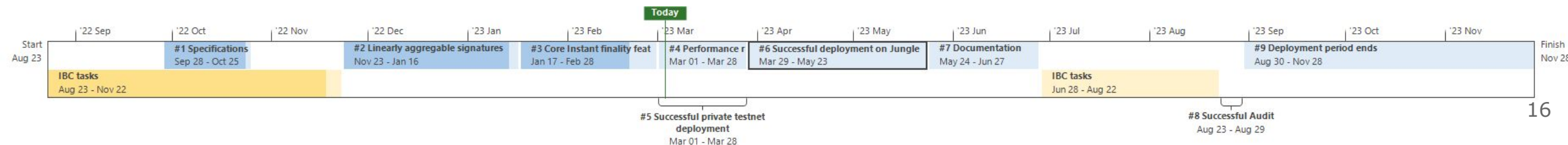
Description	Planned	Act/*Est
#1 Specifications, test definitions, mathematical proofs, latency analysis	25 OCT 2022	*17 MAR 2023
#2 Linearly aggregable signatures	15 JAN 2023	*17 MAR 2023
#3 Core Instant finality features	28 FEB 2023	*31 MAR 2023
#4 Performance review	28 MAR 2023	*30 APR 2023
#5 Successful private testnet deployment	28 MAR 2023	*30 APR 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 core protocol consensus mech. as base consensus algorithm
- Core IF unit + integration tests
- Integration with Leap data structures
- IF protocol feature activation

## Issues / Risks / Escalations

- Additional features added will push back 15 JAN 2023 milestone - **monitor**
- Limited ENF staff availability delaying peer reviews - **accepted**







Wallet+

SDK (Software Development Kit)

Greymass

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)

Report Date: 03 MAR 2023			
Status Scorecard			
Schedule	<div></div>	<div>✓</div>	<div></div>
Scope	<div>✓</div>	<div></div>	<div></div>
Resources	<div></div>	<div>✓</div>	<div></div>

## Highlights & Accomplishments

- February 2023
- WAX Cloud Wallet integration completed for live version
  - Added SessionKit storage, serialization, and restore functionality
  - Completed rewrite of login/sign method
  - Implementation of error handling for user interface
  - WAX Cloud Wallet plugin upgrades based on changes from WAX team.
  - Anchor wallet plugin initial release completed
  - User Interface specification modified to utilize cancelable promises (3-choice)
  - Released initial AutoCorrect transact plugin for automated resource management
- March 2023
- Implemented localization v1 in the web UI renderer and plugins
  - Released the 0.3.0 version of the Session Kit (UAL capabilities)
  - Released the 0.3.0 version of 11 different Session Kit wallet + transact plugins

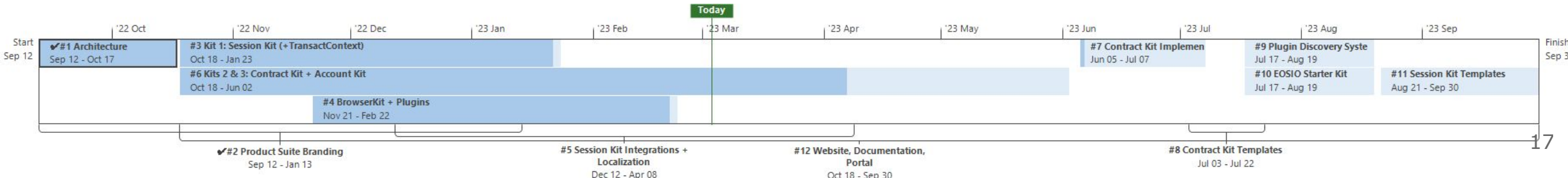
Key Milestones		
Description	Planned	Act/*Est
#1 Architecture	15 OCT 2022	17 OCT 2022
#2 Product Suite Branding	13 JAN 2023	11 JAN 2023
#3 Session Kit	23 JAN 2023	*10 MAR 2023
#4 Browser Kit + Plugins	22 FEB 2023	*10 MAR 2023
#5 Session Kit Integrations + Localization	08 APR 2023	*08 APR 2023
#6 Contract 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

- 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
- Release of wallet-plugin-anchor 0.3.0 for Anchor integration
- Publishing of blog post around the Session Kit UI technical preview

## Issues / Risks / Escalations

- Milestone #3 schedule past due, deliverables still in progress - **accepted**
- Challenges with WAX wallet plugin and WAX chain - **monitor**
- ENF to complete review on Milestone #3, PTO staff unavailability - **resolved**





Antelope

Contract Development Toolkit (CDT)

ENF

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: 02 MAR 2023			
Status Scorecard			
Schedule			✓
Scope	✓		
Resources	✓		

### Highlights & Accomplishments

- February 2023**
- Build System Cmake sprint completed
  - ENF CDT build system and package system code review completed
  - Code review uncovered issues, PR put up
  - Project Management System (antler-pack) Validate Project complete
  - 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

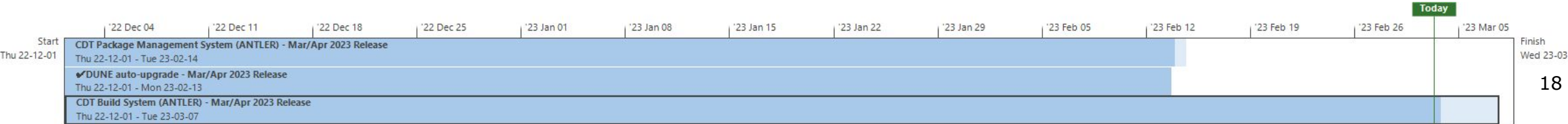
Key Milestones		
Description	Planned	Act/*Est
DUNE auto-upgrade	01 FEB 2023	26 JAN 2023
<del>CDT Debugging Framework (ANTLER)</del>	<del>TBD</del>	<del>*TBD</del>
CDT Package Management System (ANTLER)	20 FEB 2023	*10 MAR 2023
CDT Build System (ANTLER)	23 FEB 2023	*10 MAR 2023

### Upcoming Activities / In Progress

- Build System Documentation and Polish added to Build System scope
- Repair additional bugs discovered with latest PR review

### Issues / Risks / Escalations

- Competing resources and aggressive schedule for 2023 Mar/Apr Release - **monitor**
- CDT Debugging Framework to be rescheduled after next release - **accepted**
- New bugs discovered with second PR review - **monitor**





# Coalition Ledger App

ENF

Report Date: 03 MAR 2023

**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

## Status Scorecard

Schedule	✓		
Scope	✓		
Resources	✓		

## Highlights & Accomplishments

### February 2023

- WAX manager & dashboard icons complete

### March 2023

- TLOS manager & dashboard icons complete
- Draft timeline & milestone schedules presented to Coalition during call 02 MAR

## Key Milestones

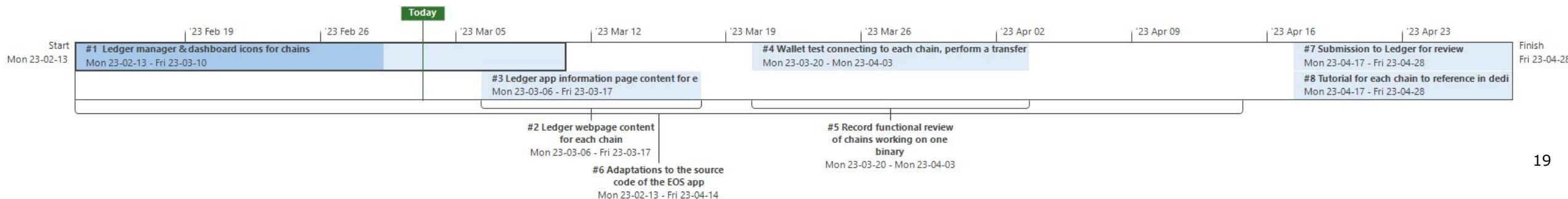
Description	Planned	Act/*Est
#1 Ledger manager & dashboard icons for chains	10 MAR 2023	*10 MAR 2023
#2 Ledger webpage content for each chain	17 MAR 2023	*17 MAR 2023
#3 Ledger app information page content for each chain	17 MAR 2023	*17 MAR 2023
#4 Wallet test connecting to each chain, perform a transfer	03 APR 2023	*03 APR 2023
#5 Record functional review of chains working on one binary	03 APR 2023	*03 APR 2023
#6 Adaptations to the source code of the EOS app	14 APR 2023	*14 APR 2023
#7 Submission to Ledger for review	28 APR 2023	*28 APR 2023
#8 Tutorial for each chain to reference in dedicated help center articles	28 APR 2023	*28 APR 2023
#9 Ledger approves submissions, activates Apps	28 AUG 2023	*28 AUG 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 Ledger app information page

## Issues / Risks / Escalations

- Business decision needed for EVM vs native network icon - **resolved**




The background of the slide is a complex, abstract geometric pattern. It consists of numerous thin, light blue lines that intersect to form a network of triangles and other polygons. Some of these shapes are filled with a slightly darker shade of blue, creating a layered, three-dimensional effect. The overall composition is dynamic and modern, typical of a corporate or technical presentation.

# **Operations Metrics**

# Operations Scorecard

(Rolling 12 months)

Area / Metrics		Link	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Market Funding														
Direct Grants Fully Approved (#)	<div>+ </div>		2	0	0	1	0	2	0					
Direct Grants Fully Approved (\$)			\$39,416	\$0	\$0	\$10,000	\$0	\$275,000	\$0					
Direct Grants Rejected (#)			2	7	1	7	2	0	6					
Direct Grants Rejected (\$)			\$54,000	\$782,000	\$50,000	\$1,093,785	\$50,000	\$0	\$600,630					
Direct Grants Processing Time (days)			73	129	174	102	88	87	95					
Community Engagement														
# of Articles / Stories published	<div>+ </div>		166	170	228	167	168	98						
# of Surveys completed			1	1	0	0	0	1						
# of Giveaway show participants			117	150	90	69	119	188						
Antelope Regression Metrics														
First Pass Yield (WF Runs)	<div>+ </div>		77%	82%	96%	95%	78%	96%	83%					

Review of Contracts, RFP and Grants status for week of 03 MAR 2023

**Status Scorecard**

<b>Schedule</b>	✓		
<b>Scope</b>	✓		
<b>Resources</b>	✓		

**Highlights & Accomplishments**

**Contracts**

- Funday MSA/SOW Fully Executed

**RFP**

- N/A

**Grants**

- N/A

**Status Overview**

Area	Document	Status	Notes
Contracts	Funday Contract	Done	Fully Executed
Contracts	Termination Letter for Yield+	Pending Review	Pending Jeff's review
Contracts	Termination Letter for Recovery+	Pending Review	Pending Jeff's review
Contracts	ICA	Work in Progress	New ICA terms for Finance.
Grants	EVM Hackathon	Work in Progress	Reviewing Winners KYC and obtaining Wallet address.

**Upcoming Activities / In Progress**

**Contracts**

- Standard Contract terms for Finance
- Proposed New Payment clause for ICA
- Assist Marketing with Terms of Use and Privacy Policy T&C's

**RFP**

- N/A

**Grants**

- Pending 2 Ideathon Hackathon winners KYC confirmation.
- EVM Hackathon KYC confirmation and Wallet Address
- Finance to send retroactive KYC data to cross check
- Training to take over Grant intake process.

**Issues / Risks / Escalations**

- Winner from Ideathon Hackathon can't upload picture into KYC.














# Completed Projects

(for reference only)

**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

**Status Scorecard**

<b>Schedule</b>			
<b>Scope</b>			
<b>Resources</b>			

**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**

- 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
- Code merge completed

**Upcoming Activities / In Progress**

- **PROJECT COMPLETE**

**Key Milestones**


Description	Planned	Act/*Est
Group & Implement GFP files (Port Golang to C++)	08 SEP 2022	08 SEP 2022
<b>+Milestones - Complete...</b>		
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	21 FEB 2023
Code in production	01 APR 2023	*01 APR 2023

**Issues / Risks / Escalations**

Complete 

In Progress 

Backlog 

»  ENFS-425 Golang Security Development