

# The Blockchain for Big Data

The data economy is a 3T USD economy that faces security, validation and legal issues

## Overview



Constellation is the Blockchain for Big Data.

Our decentralized framework enables the secure notarization, validation and query of any data source. As such, we enable the IOT and streaming data economy of tomorrow by allowing secure and compliant valuation and real-time data exchange.

Through API connection we integrate easily into existing infrastructures optimizing them for the business needs of a connected world.

## Business

The data economy is a 3T USD economy that faces security, validation and legal issues.

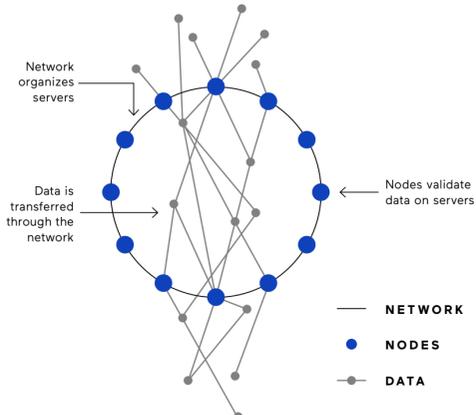
While enabling the secure exchange and monetization of data streams, Constellation can save enterprises the costs in the hundreds of millions USD resulting of insecure and bad data pipelines.

## Team

- Former Oracle, Salesforce, Google and NASA engineers
- European Central Bank and Silicon Valley entrepreneurs

## Company

- Constellation Network Inc. (Delaware C-Corp)
- Constellation Foundation (Cayman Islands)



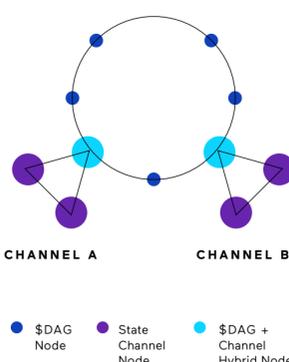
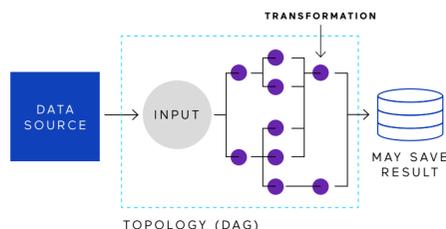
## Constellation Protocol

The Constellation Network sits on a secure communications protocol with the core features being the architecture, the consensus model and the language it was built in (Scala).

The purely meritocratic consensus algorithm PRO (proof of reputable observation) solves the problems associated with POS and POW while being more energy efficient.

## Spore API Platform

This is our proprietary pay-only platform of licensed state channels: microservice platform that provides a hosted and UX enabled application for SME's to build distributed applications, state channels, on a decentralized network (The Network) similar to Splunk and Databricks. Additionally, the path to monetization is similar to Splunk, Cloudera, and Databricks while presenting Constellation as a bolt on technology to these advanced infrastructure tools.



## Constellation Network

The layer below the network is comprised of distributed node operators that validate the data, maintained by the state channels, which was piped through an API (Spore). Just as Chainlink is an onramp for data onto DLT technology, we too provide an onramp for existing systems to transfer data onto our DAG network. We want to make sure it is easy for any developer to decide which data schema/set needs extra security and notarization and should be piped into the Constellation Network.

The infrastructure enables the data economy of tomorrow by allowing a trustless value exchange of high volume data streams

## Value Proposition

Constellation is the blockchain for Big Data and connected devices. The infrastructure enables the data economy of tomorrow by allowing a trustless value exchange of high volume data streams. Constellation secures and notarizes any data pipeline from connected devices to machine learning and integrates easily with existing systems like Cloudera or Databricks.

## Advantages

### TOKEN

- Legal Opinion U.S and Malta
- Token is used to purchase throughput beyond the rate limit
- Token enables data economy by attributing value to processed data streams
- Constellation combines the industry for profit approach with the metrics of a decentralized network by burning 10m tokens for each onboarded enterprise customer, buying throughput on exchange as well as the driving of token utility by usage in a fully developed network and data marketplace.

### TOKEN UTILITY

The DAG token is the financial state channel of the network. As such it fulfills two functions:

- DAG is a representation for tokenized bandwidth. It allows users to lift the rate limit to process network transactions which is needed for any meaningful data stream processing task.
- DAG enables the data economy by allowing the attaching of value to data. Thereby it enables the secure and compliant exchange and monetization of any data stream with other network participants.

### NODES

Hardware Requirement:

Constellation nodes can easily be installed on a machine meeting the outlined hardware requirements:

- 4 GB Memory
- 160 GB Disk
- 4 cpu

Alternatively, it is also possible to run a full constellation node on a virtual server instance (AWS,GCP) that meets the hardware requirements for a full node. Recommend minimum viable instances are:

- GCP: n1-highcpu-4 (4 vCPUs, 3.6 GB memory)
- AWS: a1.xlarge (4cpu, 8 GB memory) on demand.

### STAKING

A Foundation level node requires 250.000 DAG to be staked to participate in consensus

### TOKEN SUPPLY

Token	Total Supply	Circ. Supply	MarketCap	Price
\$DAG	4,000,000,000	1,116,297,563	4,574,015	\$0.0041
	3,712,000,000			
	*288m tokens burnt			

### WALLETS IN FOUNDATION CONTROL

Purpose	Address	Current Amount	Remarks
Validator	0x0EeF872B21cf4cFF3d793731CaEE6512211458F4	1,600,000,000	10 years from Mainnet start
Community	0xf38dDe18b63406a5815d1584334b68BafAbB896F	66,859,000	Distributed when needed
Advisors & Partners	0x4231F1557bc0ad3D810E45AC35fBb3287FF2Cb53	114,474,965	vesting until June 1 2020
Private Sale	0x6120eF25715232Ed048eA8e59103a87ae95839bA	355,889,807	vesting until June 1 2020
Foundation	0x786bde4504f9ea2Df104f593f056CD6e1A11C20a	32,526,146	Illiquid
Foundation	0x103B0055475A758a2b1A232aA734A4Ae0D776b06	501,607,623	Illiquid
Burnt	0x0704201907042019070420190704201907042019	288,000,000	Taken out of supply. Illiquid.

### TOKEN MODEL

Purpose	Amount	new %	old %
Private Sale	730,124,835	19.67	18.25
Foundation	764,810,165	20.60	19.12
Advisors & Partners	537,065,000	14.47	13.43
Validator	1,600,000,000	43.10	40.00
Community	80,000,000	2.16	2.00
	3,712,000,000	100.00	
Burn	288,000,000		7.2
	4,000,000,000		100.00

## Funds

- Private Pre-sale with accredited and KYC/AML checked presale participants only.
- 80% of funds are held in USD in bank account. 20% in BTC.
- Runway models project secure runway for coming years.

## Code Repository

<https://github.com/Constellation-Labs/constellation>

## Governance

Manual centralized governance that is gradually being handed over to the community as the network grows and stabilizes.

## Competitors

- Direct: None (Constellation is 'first mover' when it comes to real-time, on-chain auditing of big data).
- Indirect: IOTA, Hashgraph, Fantom, Splunk

## Community

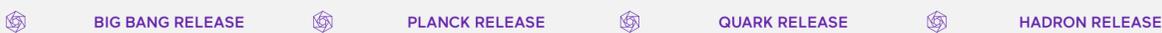
Constellation is part of a new industry. This industry is driven by the spirit of decentralization and open-source ideas.

- Global Ambassadors: 40+
- Consortium Members: Hyperledger, MOBI
- Community (200k followers): Telegram, Facebook, Reddit

## Exchanges



## Constellation Roadmap 2019



### Node Validators Selected

Constellation launches a new website. We will announce our first round of Node Operators and release documentation for Node Operators and "The Draft".

SEPTEMBER

### MainNet Launch: MainNet Swap

We will be swapping our ERC-20 Token with DAG.

NOVEMBER

### MainNet: Application Demos: Draft 3

Demos of early application support and accompanying release of dev docs. Draft 3 Kicks off on-boarding 20-30 new groups.

JANUARY 2020

AUGUST 2019

### MainNet Launch: Node Operators On-boarding

Planck Phase kicks off with Draft Round 1. Here we will be on-boarding 10-20 groups of 1-10 nodes each to be foundational nodes.

OCTOBER

### MainNet: DRAFT Round 2

Quark Phase kicks off as we expand the network! We introduce 20-30 more groups to the Node Operator community. We also begin to transition governance to voting mechanisms within the Node Operator community. Introduction

DECEMBER

### Main Net: Application Support Draft 4

The Hadron Phase begins rollout of state channels and application support to main net. Draft 4 on-boards the final cohort of 20-30 more groups representing foundational Node Validators.

MAINNET ROLLOUT

## RECENT RESOURCES

- Vision paper
- Light paper
- Tokenomics paper



exchange@constellationlabs.io      constellationlabs.io