

Milestone 3

NX CAPITAL

April 23rd, 2018

FACTOM AUTHORITY SERVER CANDIDATE

Table of Content

Business Model	3
Vision	3
Strategic Focus	3
Implementation	3
Technical Infrastructure	4
Support Infrastructure	5
Corporate Infrastructure	5
Products & Services	6
Price Arbitrage (Project Parity)	6
Fund Management Market Place (Project Alchemy)	6
Secure Crypto Wallet (Project Stasis)	6
Asset Tokenization (NX Capital)	6
Our Commitments	7
Grant Pool Contribution	7
Factoid Staking	7
Team Profile	8
Xavier Chen	8
Thomas Meier	8
Shuang Leng	9
Jason Chen	9

BUSINESS MODEL

VISION

We see Factom used in every industry as a critical part of the backend component to meet regulatory requirements. The difficulty in achieving this vision is the lack of user-friendly implementation tools for real world businesses. Our team wants to be the bridge to that future by building products and services that will seamlessly integrate existing business processes with Factom protocol.

STRATEGIC FOCUS

Unlike other authority nodes who primarily focus on the strength of their technical contributions, NX Capital wants to focus on building out the business eco-system that will exist alongside Factom protocol. Short term, we will focus on regulatory guidance to lay the groundwork needed to bring various industries onboard. Long term, we want to demonstrate to the financial industries that adopting Factom protocol can reduce their overhead and improve compliance.

IMPLEMENTATION

To implement our vision, NX Capital will pledge \$100,000 to ensure two + years of runway. The first step is to be elected as one of the authority nodes. As an operator, we will be laying the technical groundwork for Factom protocol. This ensures there exists a solid foundation on which our business can scale. The financial reward is an added incentive for us to be involved early because the factoid rewards can be used to increase our startup runway and reduce future cash flow risk.

TECHNICAL INFRASTRUCTURE

We will start with Google Cloud Platform using both Compute Engine and Kubernetes Engine. We used tools like terraform, ansible, docker, and GCP CLI, to build the ImmutableServer pattern for nodes.

	Google Cloud Platform	Google Cloud Platform
Location	Belgium/St. Ghislain (Europe-west1-b)	Brazil/Sao Paulo (Southamerica-east1-a)
CPU type & clock speed	Intel Skylake 2.0Ghz 4 cores with custom memory (n1-highcpu-4)	Intel Skylake 2.0Ghz 4 cores with custom memory (n1-highcpu-4)
RAM	26 GB	26 GB
Storage	250 GB SSD Storage with separate disk for Factom data	250 GB SSD Storage with separate disk for Factom data
Connection speed	6 Gbps	6 Gbps

With our approach to node management via ImmutableServer, we compose them with tools like Kubernetes and docker to ensure that we achieve PhoenixServer resilience. Problems like DOS attacks and even accidental deletions will be simulated (we have experience with Chaos Monkey by Netflix and would like to use this with our internal testing) to see how our automated disaster recovery systems react and rebuild our nodes.

Security planning will involve use of guard nodes, VPC, and firewall rules. Guard nodes help mitigate DOS attacks and insulate authority nodes from the network. We will be deploying guard nodes in multiple zones and utilize the networking features of GCP to control the authority node's peer connections. The VPC ensures the authority nodes rely on the guard nodes exclusively. And our firewall rules control network capabilities of nodes.

SUPPORT INFRASTRUCTURE

We have additional personnel stationed in Japan, Ireland, and United States to ensure 24/7 coverage.

We will use Datadog as external monitoring of nodes (supposing that internal monitoring tools can fail), such that all team members are notified by phone, email, discord, etc., In case of emergency updates or unscheduled restarts, we will always have a team member available to coordinate with other operators.

CORPORATE INFRASTRUCTURE

NX Capital LLC is a holding company that is being used temporarily to limit liabilities until a new entity is established. Our team is waiting for the approval of an offshore entity that meets our long-term commitment to the crypto space. This process takes between two to three months. Once established NX Capital LLC will be absorbed into the new entity as a subsidiary.

The new corporate structure will benefit Factom community by:

1. Shared the corporate structure with other authority nodes to save substantially on taxes (< 7%).
2. Create escrow services to hold community funds like grant money in either factoid or fiat.
3. Friendly banking relationships to allow OTC trading and crypto business accounts
4. Laying the groundwork for Entry Credit Market Place

PRODUCTS & SERVICES

PRICE ARBITRAGE (PROJECT PARITY)

- Platform that acts as a clearing house for professional and retail traders to execute arbitrage opportunities. We have a setup where we can eliminate pricing risk for the traders without touching fiat. Allowing the crypto community to take advantage of 5%-25% price discrepancies with very low risk is a very attractive proposition.

FUND MANAGEMENT MARKET PLACE (PROJECT ALCHEMY)

- Building off of the Project Parity, we will create a market place that allows retail and professional investors to hire day, algo, and trend traders to manage their funds. The platform allows anyone to pick and allocate their fund to different strategies and fund managers. Imagine mutual funds/index funds for the crypto world.

SECURE CRYPTO WALLET (PROJECT STASIS)

- To supplement Project Parity and Project Alchemy, we will create an enterprise level crypto wallet. Create a user-friendly but secure environment to hold crypto assets allows us to tap into the dark liquidity pool that is currently inaccessible.

ASSET TOKENIZATION (NX CAPITAL)

- End goal of these various projects is to host a platform that allows trading of tokenized assets. This will act as interception between traditional economy and crypto economy by allowing trading of real estate, bonds, insurance, etc.

The backend of above mentioned projects will be powered by Factom to demonstrate feasibility of the protocol. This will be used to bring traditional financial players onboard, which will open up the floodgate in term of utility for Factom protocol.

OUR COMMITMENTS

GRANT POOL CONTRIBUTION

To show our commitment to Factom Protocol, we pledge to give 50% of rewarded factoid back to the community.

However, at the onset of M3, 25% will go to community grant pool and the reminder 25% will go to an internal grant pool which will we use to pay for services that can benefit the whole community. For example, most of that 25% will go toward legal expenses. The legal opinions obtained regarding commonly shared concerns will be shared with the community. This arrangement will only last six months, at which point all 50% will go to the community pool.

The rationale for this set up is because of the uncertainty behind when and how the grant pool will be used. Because time is of the essence in crypto market, NX Capital believes it is prudent to get legal guidance sooner rather than later.

FACTOID STAKING

We also pledge to retain all our awarded factoid and stake them. We will be paying our operational cost out of pocket the first year. By second year and beyond, we plan to burn some of the factoid to use EC for business needs.

TEAM PROFILE

XAVIER CHEN

Discord: @xavierwjc

Linkedin: <https://www.linkedin.com/in/xavierwjc/>

Xavier has over seven years of experience running businesses and managing large capital. He manages \$5+ million in real estate investment portfolio with over \$30 million in real estate transactions. Outside of real estate, he has experience in technology start up and business brokering. Prior to his professional career, Xavier grew up in small family business and helped run it since teenager. At college, he was the President of the student body. In that capacity, he coordinates between 15 committees (100+ members) and handled annual budget of \$700,000.

THOMAS MEIER

Discord: @tomjm

Linkedin: <https://www.linkedin.com/in/tomjmeier/>

Thomas has over 10 years of experience working in systems and software engineering. He has worked in asset-heavy, CPU-intensive, high availability environments such as HTTP Live Streaming for video and video transcoding -- including automatic scaling of Linux web servers from zero to millions of users without downtime. He works as a consultant in DevOps culture and Site Reliability Engineering (SRE) for agencies handling high scale clients where high availability is critical. This includes a direct role in implementing SRE practices such as automated deployments, automated scaling, monitoring systems, and automated disaster recovery in order to eliminate risk of downtime. Thomas has extensive experience with a variety of infrastructures as well as cloud providers such as Amazon Web Services and Google Cloud Platform.

Team Profile

SHUANG LENG

DISCORD: @SL

Linkedin: <https://www.linkedin.com/in/shuangleng/>

Shuang is a partner at Huang-Sigle & Leng LLP, a firm law located in Houston Texas. Her primary practice areas are corporate transactions, business planning, real estate transactions, commercial litigation, and estate planning. Prior to starting her firm, she served as a corporate counsel for a telecommunication company, where she gained extensive experience in both transactional matters, corporate governance, and multi-state business taxation. She is adept in contract review, analysis and drafting, and have a deep understanding of corporate structures and business entities. She has advised on legal and tax aspects of business planning and assumed principal responsibility in executing business restructuring plans. Shuang is also well-versed in deal steps, equity structures, fund flow, due diligence, and M&A taxation. She developed all essential algorithms for a tax calculator, which compares and ranks tax liabilities and benefits resulting from all available deal structures (stock sales, assets sales, mergers, 338(h)(10) elections, etc.) for sales or acquisitions of C corporations, S corporations, LLCs and partnerships.

JASON CHEN

Discord: @Neo

Linkedin: <https://www.linkedin.com/in/whcjasonchen/>

Jason has over 5 years of experience working with executives by maintaining the entire revenue cycle (Claims, Payment Posting, Statements, Refunds, and Collections) for large healthcare organizations. He has advised and implemented automation for 90% of the revenue cycle processes using EHR system called Epic. For those that cannot be automated; he identifies and implements workflows for staff to work manually. Jason also approves the final documentations created for the automations and manual workarounds to ensure that there are no ambiguities or inaccuracies. On average, organizations bill 3-6 million dollars of charges per day. After insurance adjustments, FPL write-offs (to maintain non-profit status), and bad debt processes the total annual gross is around ~700 million.