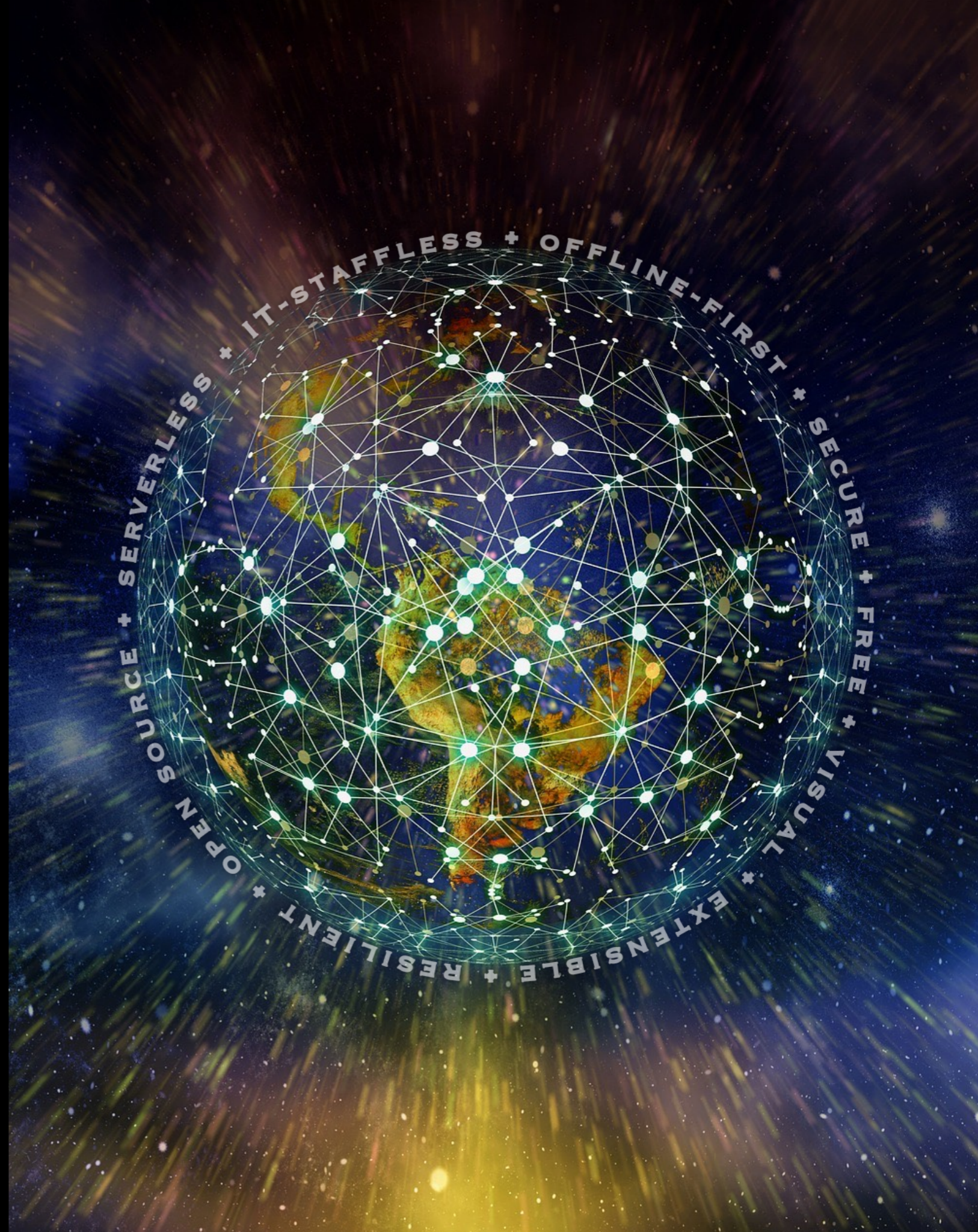PLAN Systems

Privacy
Logistics
Accessibility
Networks

Introduction to a communications and logistics planning tool designed for communities and organizations.

SERVERLESS + IT-STAFFLESS + OFFLINE-FIRST + SECURE + FREE + VISUAL + EXTENSIBLE + RESILIENT + OPEN SOURCE

An Austin Texas Based Charitable Non-Profit

Contents

- Development Roadmap

- 501(c)(3) Part IV, Narrative

- Director Biographies

- Financial Data

- Articles of Incorporation

- Bibliography

We believe people profoundly benefit from having the tools to connect securely with each other, manage common resources, and to engage in meaningful projects. With the arrival of digital decentralization and encryption technologies, we're closer than ever to a world where free, powerful, and easy-to-use tools allow communities with few resources to self-organize.

Having the ability to communicate independently, securely, and reliably is essential to our survival. Yet, our ability to freely communicate is increasingly and alarmingly dependent on a handful of data services and infrastructure providers; many of which are corporate entities, often with uninspiring motivations or negligent security practices for the personal data in their custody. It is now commonplace for opaque third-party services to aggressively track, store, and correlate the digital footprints that we leave behind. Although these services offer value, fundamental questions arise: who has access to the data we generate? What digital rights are assured, if any? Will the data we rely on be available when it is most needed?

The modern information networks we rely on today are not only defined by richly interconnected content, they are characterized by interlinked layers of ad-hoc information (metadata), linking into and out of existing content (links). We have arrived at an era where meta information are as meaningful and valuable as underlying content. Meanwhile, blockchain technologies and distributed digital trust systems are redefining how information and media can be accessed, interconnected, and visualized.

In some ways, blockchain and distributed technologies are a callback to the rise of microcomputers in the 1980's and 90's. At the time, engineers were enamored with the potential and utility of computing devices but were saddled with the ongoing challenge of making them usable for non-experts in technology. Command-line interfaces were the primary means for interacting with programs and file systems, but only a small percentage of people had the skills patience to use them. In time,

graphical interfaces developed and evolved, giving non-technical users open-ended access to highly complicated software and hardware systems.

Today, distributed technologies and peer-to-peer protocols offer astonishing potential, but they lack a consistent and unifying graphical user experience. Distributed blockchain and "serverless" cloud technologies are ready to be integrated into an accessible, integrated, and visual interface that supports human communications, and isn't easily compromised by mass-messaging and spam, third-party interests, or malicious actors.

Introducing PLAN

PLAN is a multi-purpose communications and logistics planning tool for organizations and communities. Its open "pluggable" architecture integrates distributed storage, encryption, and interoperable data-transport technologies — all accessible from realtime visual interface. As a decentralized productivity solution, PLAN offers a rugged platform that is secure, extensible, "offline-first", "serverless" and "IT-staffless". As PLAN matures as a platform, it will provide organizations with empowering tools to communicate and self-organize.

As an information visualizer, PLAN allows teams to communicate and conduct critical logistics planning with high reliability, persistence, and privacy. Software platforms of the future need to offer decisive assurance that the information we store and depend on will be available not only during times of prosperity, but also in natural disasters, geopolitical crisis, or economic drought. Here are some examples of how the mature PLAN platform could be used out of the box, requiring no servers and no IT professionals: ref. Exhibit E.1.

Use-Case Scenarios

- A resource-starved inner-city neighborhood uses PLAN to organize a shared community garden, announce social events, track the availability of home improvement tools, and be the logistical hub for a neighborhood watch.
- A disaster recovery effort uses PLAN to conduct crisis management, coordinate volunteers, identify environmental hazards, and track resupply efforts. Using only donated laptops, wifi routers, and power from on-scene generators, volunteers have rich interconnectivity and support.
- A teacher uses PLAN to lead students through a multi-location field-trip where tasks and learning objectives unfold as the student progresses through an exercise.
- An off-grid farming community uses an interactive land map to create a shared seasonal calendar, document geographical features, track farm supplies, and assign duties.
- A media production uses PLAN to coordinate a multi-site shoot, foster multi-discipline collaboration, and allow video data stores to be internally managed and assessed securely — all with or without Internet connectivity.
- A creative maker-space uses an image of the floor-plan to spatially link to equipment documentation, training videos, sign-out schedules, and broadcast live demonstrations.
- A emotional support group uses PLAN to facilitate group communication, schedule meet ups, and use forms for check-ins — all in complete confidence with end-to-end encryption.
- A city-council uses PLAN to elicit feedback from their community and to codify the legislation and voting record of the council into a persistent and permanent public record.
- A volunteer-run community uses PLAN to organize and execute a multi-day event. Calendars announce key dates and meetings, schedules manage volunteer shifts during the event, forms are used to collect information from participants and staff, maps orient participants to designated camping areas and facilities, and open issues appear in a tracker that also serves as an ad-hoc staff work list.
- A solar installation business uses PLAN as a daily communications tool to stay in direct contact with crews, manage contracts, track materials, and handle customer feedback.
- A mobile food-truck uses PLAN to publish it's weekly location and menu on a community map. The chef uses a sheets channel to track sales by location and the kitchen inventory.

DEVELOPMENT ROADMAP

PLAN Plugin Architecture

The diagram below represents PLAN running on a computer or mobile device. PLAN is designed to scale from running on a mobile platform, all the way to a high-powered workstation with lots of screen space -- including Windows, macOS, linux, Android, and iOS. PLAN supports all these platforms because it's built using Unity, best known for making industry-leading 3D games. The world may regard Unity as a game platform, but we regard Unity as a platform to make graphically-integrated productivity software. In this way, Unity's full potential is hidden in plain sight.

PLAN's Persistent Data Interface (PDI) is designed to encapsulate any datastore that is fundamentally append-only, while the Cloud File Interface (CFI) can encapsulates any content-addressable data-store. This means that most blockchains and distributed storage systems only need an adapter in order to be harnessed and integrated into PLAN.

PLAN: 2D-3D Interfaces + P2P Infrastructure

With the benefits of C# and .NET, PLAN's codebase is strongly-typed and written using industry-standard dialects and interfaces. The first generation PLAN client application is built with Unity3D, which supports dynamically linked libraries, enabling PLAN's open plugin architecture. As an evolved game engine, Unity offers unbridled use of the local file system, all the computing and execution hardware, and all the graphics capabilities the machine has to offer.

Components and Features Roadmap

	PLAN Prototype	MVP	Medium Term	Long Term
Infrastructure "pnode"	Linux, macOS, Windows	Linux, macOS, Windows, Android	DIY imaging	Curated imaged hardware & support
User Client (Unity)	Linux, macOS, Windows	Linux, macOS, Windows, Android, iOS*	Multi-platform installer	Native install
Capabilities	Messaging, notes, 2D/3D/maps, feeds	Files, calendars, scheduling	Task & supply management	Spreadsheets, archiving, data visualization
Integration Level	Interoperable data formats & protocols	Web publishing (file and media serving)	Developer SDK	Developer support & training

☑ PLAN Prototype (Pre-Alpha)
- Persistent data channels
- Cross-platform compatibility
- Multi-tasking tabs
- AR VR Visor / Panel System
- Navigate spaces within spaces
- Asset Module SDK

🟥 P2P Infrastructure and Vault Storage implementation
- Accounts, File System

🟩 Visor / Panel System

🟨 Spatial Navigation and Mapping Tools

🟪 Channel UI / UX
- Messaging
- Conference
- Tasks
- Calendar
- Docs, Spreadsheets

⬜ Asset Module SDK & Templates

🟦 PLAN MVP Testing
Hardware integration and testing
A new PLAN installation includes:
- Community Genesis
- Preinstalled Spaces
- Expanding inventory of Channels
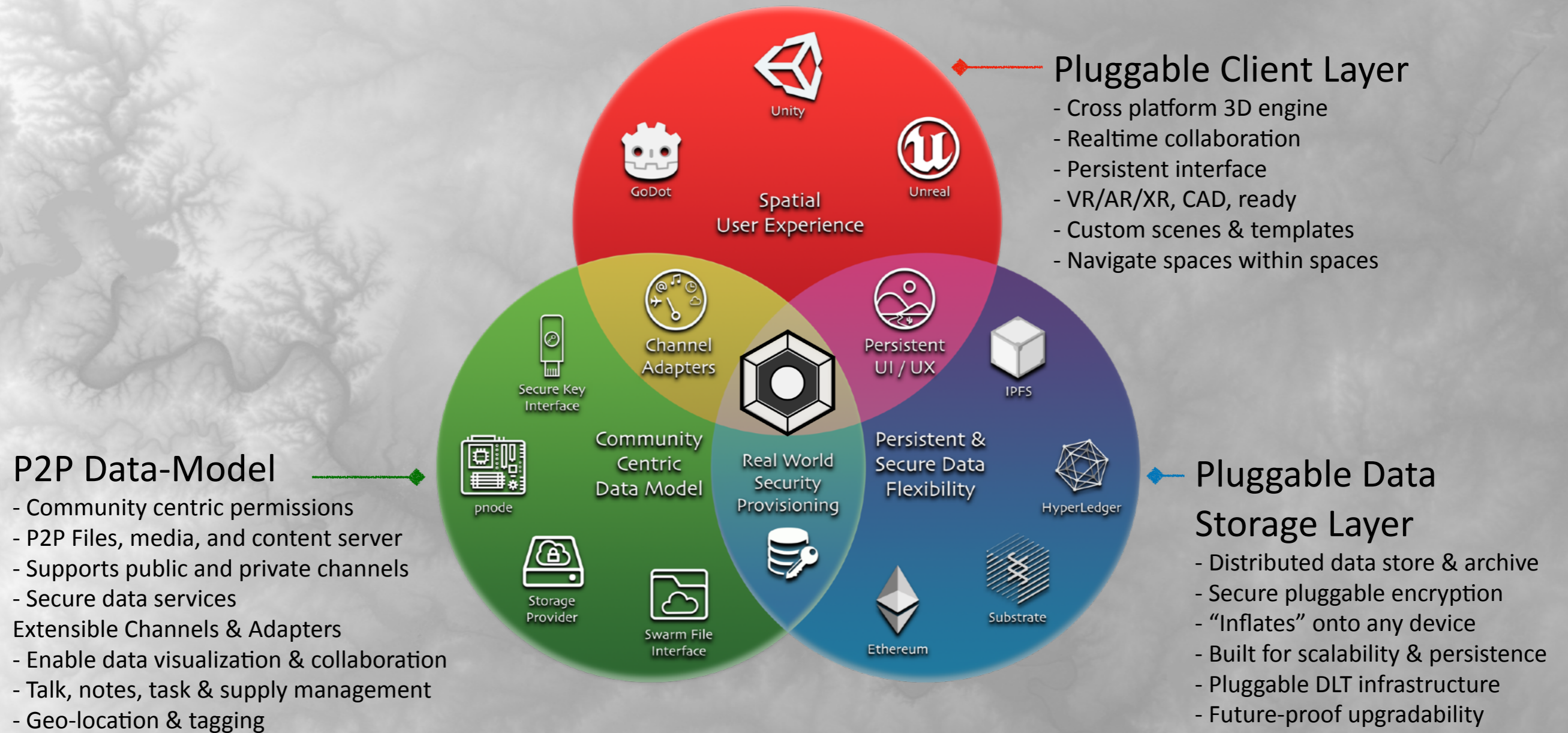- Infrastructure to develop instruments, templates, and modules

🟧 Distribution:
6 platforms, App & SDK
- Mac, Win, Linux, iOS, Android, Unity Asset Store
- Fundraising and outreach with contributing networks
- Focus on regenerative agriculture and accessibility

* time dependent on participation

Jan 2021   Q1   Q2   Q3   Q4
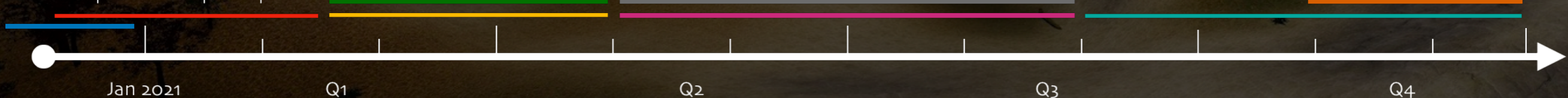
Framework for a Community OS

A complete and integrated system designed for communications, realtime collaboration, spatial planning, and secure data portability.

Pluggable Client Layer
- Cross platform 3D engine
- Realtime collaboration
- Persistent interface
- VR/AR/XR, CAD, ready
- Custom scenes & templates
- Navigate spaces within spaces

P2P Data-Model
- Community centric permissions
- P2P Files, media, and content server
- Supports public and private channels
- Secure data services
Extensible Channels & Adapters
- Enable data visualization & collaboration
- Talk, notes, task & supply management
- Geo-location & tagging

Pluggable Data Storage Layer
- Distributed data store & archive
- Secure pluggable encryption
- "Inflates" onto any device
- Built for scalability & persistence
- Pluggable DLT infrastructure
- Future-proof upgradability

Unity
GoDot
Unreal
Spatial User Experience
Channel Adapters
Persistent UI / UX
IPFS
Secure Key Interface
Community Centric Data Model
Real World Security Provisioning
Persistent & Secure Data Flexibility
HyperLedger
pnode
Storage Provider
Swarm File Interface
Ethereum
Substrate

Importantly, a Unity distribution license is affordable, unrestricted, royalty-free, and legally irrevocable. In the unlikely scenario where Unity Technologies unfavorably changes their licensing terms, we can still build and ship PLAN using the version of Unity that we most recently "locked in." PLAN can then transition to another engine, such as Unreal.

Design Principles & Key Concepts

Serverless & IT-Staffless

Community workstations share the load and storage of the community, and PLAN is meant to be installed and managed by anyone who is proficient in desktop software fundamentals.

Datastore-abstracting architecture

PLAN's persistent data interface (PDI) integrates "third-generation" blockchain technology as a plug-in. This architecture is designed to encapsulate most large-scale data storage abstractions, such as a database or blockchain, as an abstractly addressable datastore. This means that most data-stores or peer swarms only require an adapter in order to be harnessed and integrated within PLAN.

Offline-first

Because PLAN's PDI abstracts data storage, it benefits from third generation blockchain features. In these systems, LAN (local) resources are queried before WAN (remote) resources. This means that any off-grid community can use PLAN independently. Examples: a farming community in California, a recovering neighborhood in Detroit, a disaster relief zone, a cruise ship community, an outpost in Antartica, or an outpost on the moon.

Maintainable & built-to-last

PLAN is designed to be reliable and something your life could depend on. The PLAN primary codebase is written in strongly-typed and industrial-strength languages, C++11 and C#.

A native, multi-platform application

PLAN is written in Unity (and potentially Unreal), so every major desktop, mobile, and console platform is supported. PLAN leverages Unity's high performance and robust cross-platform engineering.

Free, open-source, unencumbered, future-proof

PLAN is offered under the GNU 3.0 license. It is essentially free in every respect (other than someone re-releasing it as proprietary). This also allows any party to fork, modify, or repurpose the code for their own customized needs. PLAN also uses simple open protocols that are open-ended in expressibility.

Data integrity & privacy

By design, PLAN's PDI layer leverages security, privacy, and redundancy patterns made efficient and featured in most modern blockchains. For example in most swarm-class blockchain systems, node data inherently self-replicates, allowing many nodes to "halt or catch fire" without concern.

Although PLAN helps manage user security as a graphical experience, the underlying model is that it merely passes user credentials from the workstation (such a key-fob or USB device) to the appropriate underlying PDI layer.

Persistent, comprehensive, flexible data model

PLAN offers the best attributes of IRC, wrapped into a spatial user experience (rather than a hierarchical or windowed/2D experience). A link for a PLAN "channel" can be placed anywhere in space, allowing comms to be integrated in novel ways on maps, timelines, calendars, and other future virtual spaces. A channel is PLAN's fundamental unit of encapsulation so any flavor of data can be pushed (appended) to a channel. E.g. text, html, images, links, etc.

Community-focused

Forms, surveys, contact management, media sharing, file sharing, scheduling, graphical timelines, and "chop chain" organizational approval blocks are primary and first-class user experiences in a mature PLAN platform.

Integrated file/media sharing

PLAN's internal Cloud File Interface (CFI) allows arbitrarily large files to be efficiently shared and transferred to other members in your PLAN community, leveraging the advantages of content-based addressing and swarm-based file transfers. File linking is fully integrated into PLAN. Any file (or set of files) can be linked from/to/within channels (e.g. communications logs, locations on maps, contacts, calendars, etc.).

Richly integrated 3D visual experience

As a native Unity application, PLAN offers a real-time interactive visual experience that historically only games offer. By developing PLAN in Unity, interactive input devices like a VR headset come "for free".

Intuitive/Spatial browsing

Since PLAN is a real-time spatial user experience, there is no concept of back arrow. Instead, one spatially zooms into and out of linked media, files, and sub-channels. Information and links that are multiple degrees of separation "away" from the user are minute in scale compared to items directly in the field of view. A channel or content element can be pinned to any number of time-space or geo-space locations.

Intuitive/Spatial search

The user's primary search experience converges into the browsing experience as you navigate towards content of interest (rather than only being able to search all data against a search query string). Support for traditional host-provided search is compatible with PLAN's PDI addressing schema.

Conventional spreadsheet support

With maturity, PLAN will support critical spreadsheet editing, visualization, and integration with communications. PLAN channels and forms are also designed to manage and track digitized assets and inventory.

Contact & relationship management

PLAN is designed for large-scale relationship management. Each contact channel contains that contact's public-facing information. Locally, a PLAN user can store private notes and links as they relate to the contact.

Integrated A/V

Local mic and camera recordings can be seamlessly recorded and stored as shareable community cloud items (or kept private but shareable between devices).

Lightweight; minimal system requirements.

PLAN's hardware and software requirements are highly scalable. Even most Windows, OS X, and linux systems older than late 2000s are usable as PLAN workstations. Integrated GPU hardware on even budget machines is sufficient for PLAN, allowing many communities with few resources to operate a PLAN network on gifted/donated hardware.

Community-centric security model

Any given PLAN community is invite-only and invites are logged into the community's records. This means that the process for inviting someone to be a community member is restricted to a community's administrators (or their delegates). Further, since the organization of a typical PLAN community directly corresponds to physical relationships, invitations can be restricted to in-person key exchange, providing another layer of security. PLAN is a community-centric "workgroup" and infrastructure tool.

PLAN Software Design Principles
A Virtual Operating System (OS) that provides:

Total Data Ownership & Privacy
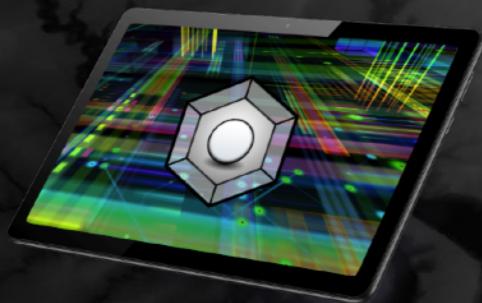
Community Centric Permissions

Off-grid Operation

Real-World Security Provisioning

End-to End Encryption

Immersive 3D/VR Ready Client
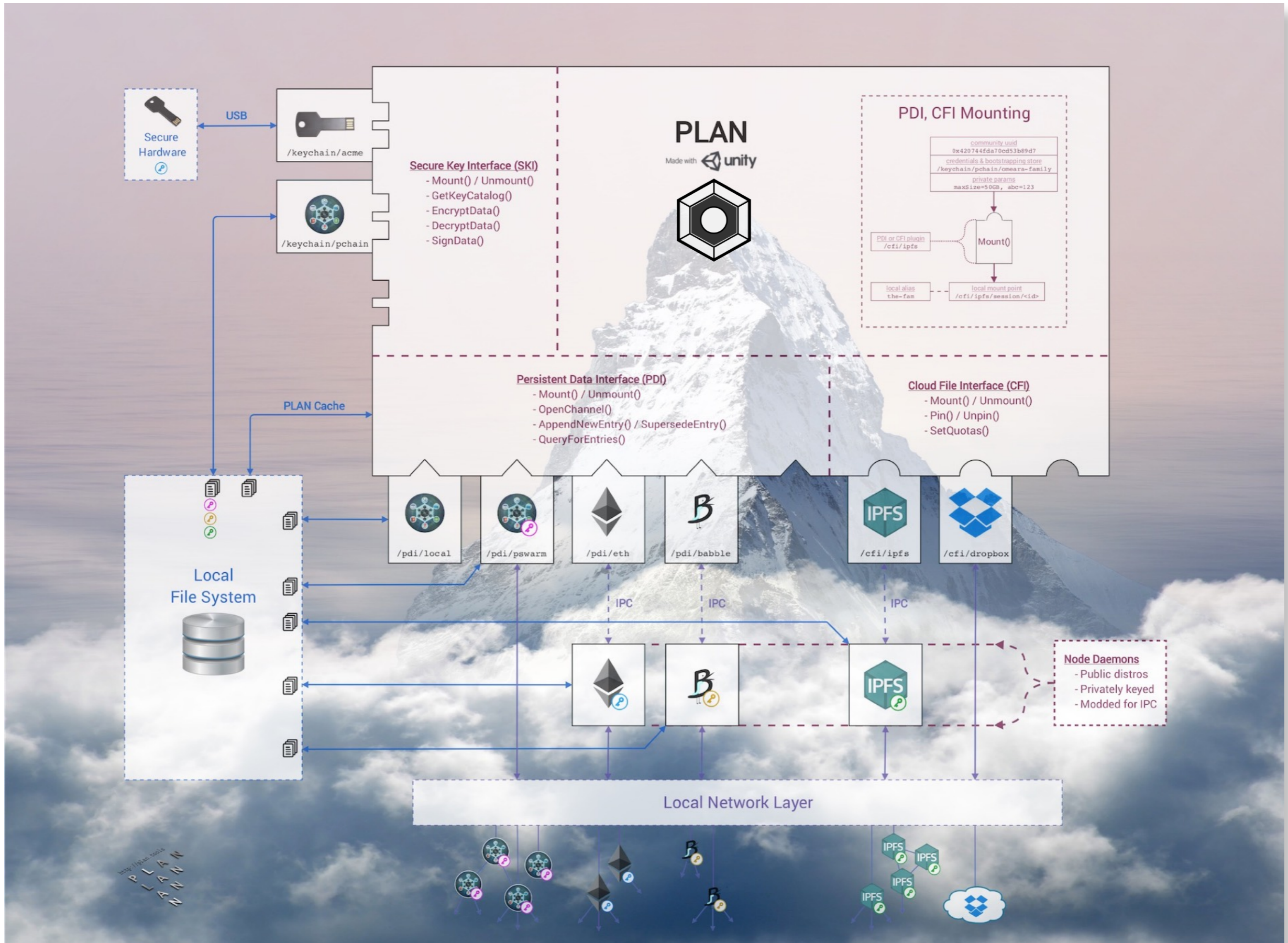
Gatekeeperless Distributed Ledger Tech

Pluggable Architecture

Data & Infrastructure Redundancy

Hardware Agnostic Open Source GPLv3

PLAN's Open Plugin Architecture depicted with plugin components developed by Ethereum, IPFS, Babble, HashGraph, and Dropbox; for example purposes only.

Communities and Swarms

A community refers to the people who have shared mutual interests and goals. A community swarm refers to the nodes of a community's members that are hosting that community's data. When someone is invited into a community (or co-creates a new community with others), each node of the community maintains a whitelist (corresponding to the members of the community). This means that only the nodes of community members have access privileges to establish communications with other community members. This enhances security significantly and ensures that non-community nodes are highly limited in how they can assert malicious behavior.

PLAN Systems - Technology 501(c)(3)

As a non-profit organization, PLAN Systems creates and integrates open technology solutions for organizations and communities. All PLAN source code, assets, and intellectual property are maintained and administered by PLAN Systems. Our organization's structure has been explicitly designed such that this technology cannot be made proprietary or otherwise moved into private hands. **Our mission:**

⬡ Research, develop, and deploy technology solutions that overcome significant challenges in human communications, logistics, and self-organization.

⬡ Train and educate organizations and communities about PLAN and its benefits.
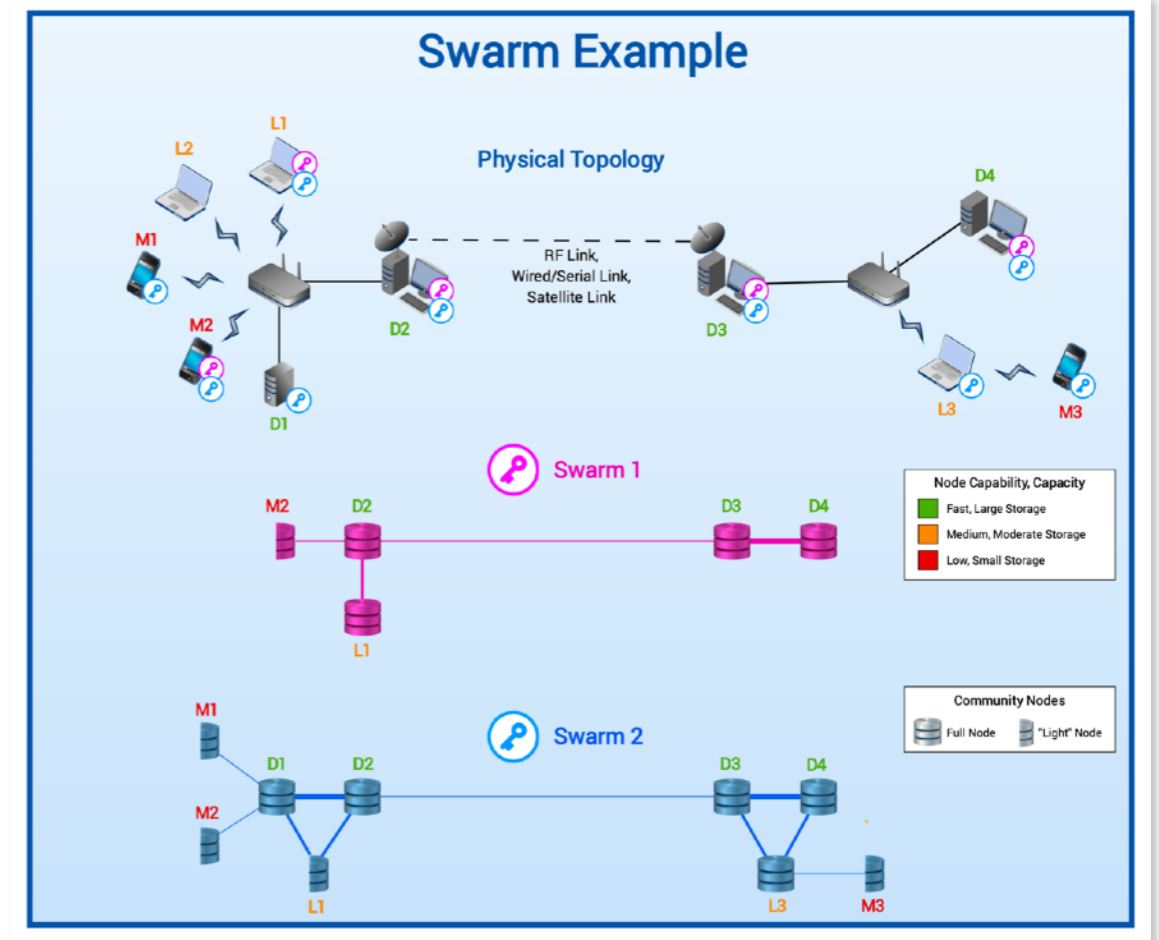
The core components of PLAN are open-source via the GNU General Public License (GPLv3), making the platform freely open for modification and adaptation. PLAN Systems is based in Austin Texas, developing and providing publicly available systems that foster robust digital self-reliance for communities and organizations.

Project Components and Features

On an engineering level, the PLAN project is comprised of three fundamental layers: the client/user-interface, the channel system, and the underlaying persistent data store. PLAN refers to the primary native application running on any of the supported platforms (Windows, OS X, linux, Android, iOS), and LAND refers to installation and setup process that configures PLAN and its underlying components.

Designed to be used by anyone proficient in desktop software fundamentals. LAND installs all relevant PLAN binaries and walks the user though the install/setup process based on how the users answers questions and the specifics of their technical setup. The LAND setup application is a Unity application that specializes in interacting with the user and managing the currently installed setup.

The LAND user experience assigns storage directories, establishes limits and quotas, prompts for keys as needed, and outputs newly generated keys as appropriate (including restoration keys that would presumably printed out for "cold" storage). For example, a common install pattern would be for a primary-use key to be output locally to a USB device, with N recovery keys generated. In the event of a primary

key loss or compromise, the user would need a majority of the recovery keys in order to reset and regenerate the primary-use key. This makes the LAND application a key management assistant as much as an install/setup assistant. As cryptologists already understand, these kinds of essential utilities are critical to securing our valuable relationships, data, and resources.

"Privacy Logistics Accessibility Networks"

PLAN is highly modular, architecturally abstracted, and is designed for 3rd party extension and modification. PLAN turns the gatekeeper software model on its head by pairing an unencumbered user experience, with a realtime 3D visual interface that is adaptable to your organization's needs. As these emerging information technologies mature, and their utility becomes more widely demonstrated and understood, the need for a versatile, reliable, redundant, realtime, VR-ready community operating system like PLAN will be absolutely clear.
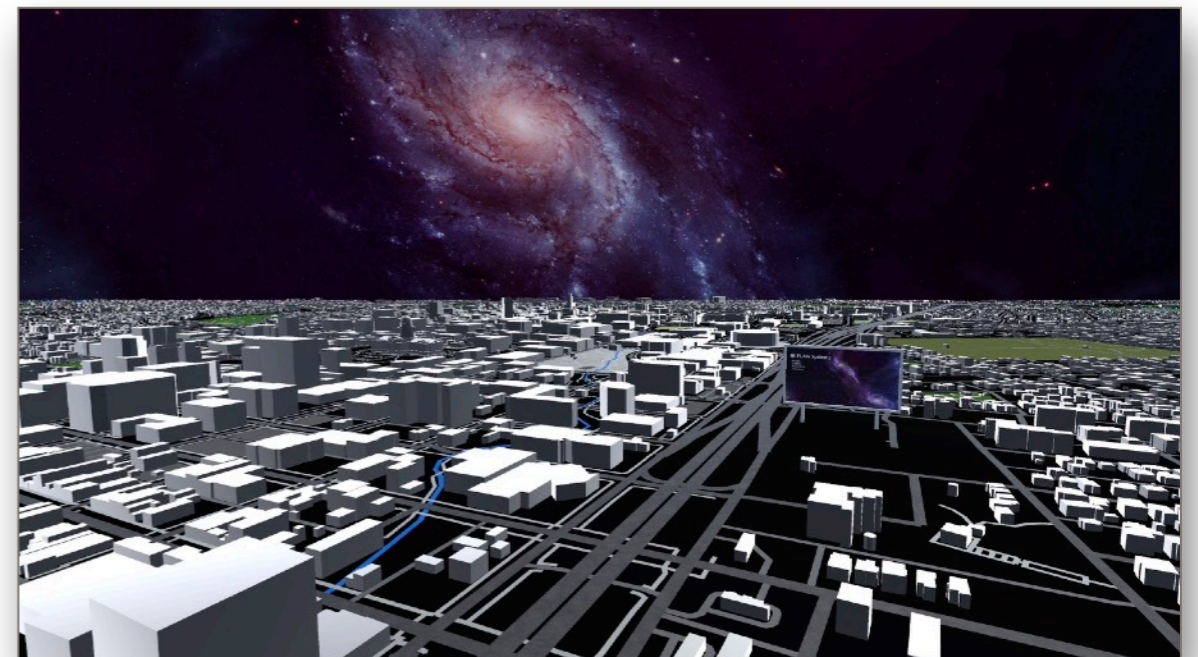
PLAN Milestones

Timeframe	Description
2018 Q2	Permissions model proof of concept
2018 Q3	PLAN Proof of Correctness complete
2018 Q4	Implementing critical layers of PLAN: wiring the security & storage layers
2019 Q2	Channel Science - authoring a framework for developing PLAN applications
2019 Q3	go-plan command line proof of concept demo
2019 Q4	plan-unity client proof of concept demo
2019 Q4	PLAN architecture prototype implementation
2021 Q1	Ethereum, DFINITY, Holochain, or another established DLT used for next PDI implementation
2021 Q2	PLAN Systems internally replaces Slack with PLAN
2020+	PLAN prototype available to supporters, sponsors, & contributors (technical assistance required)

Glossary of Terms

Term	Description
p2p protocol	Any shared network protocol such that aggregate work and bandwidth needs are distributed over the total set of peers. A peer swarm is characterized by having no centralized server or decision maker, so connections are solely peer-to-peer.
node	Generally refers to any CPU/computer instance on any sized network that has connectivity to other nodes running an identical (or compatible) version of a p2p protocol. Nodes are directly or indirectly connected over a network to form a swarm.

Term	Description
swarm	A set of directly or indirectly connected nodes (peers) that collectively share workloads, bandwidth demand, and storage demand. A swarm is synonymous with a group of compatible nodes communicating via a set of p2p protocols.
transaction	An unforgeable data unit generated by a participant with the intention to modify the global state of a blockchain or hashgraph. In order for a transaction to be considered complete, it must be appear in a block in a blockchain or hashgraph sufficiently enough in the past for the consensus to believe that the block's status will not be overturned in the future.
blockchain	Sequential list of cryptographically interlocked data blocks. Each block contains transactions that each sequentially advance the global distributed ledger's state based on the order that they appear.
hashgraph	An approach to "trustless" peer-based distributed storage other than blockchain. In a hashgraph, cryptographically signed meta information about who has seen past transactions is appended to transactions ("gossip"), allowing nodes to implicitly and deterministically auto-generate byzantine fault-tolerant (BFT) consensus, an sought-after grade of consensus.
deterministic	Certainty that one and only one outcome will arrive given an initial set of conditions or states.
consensus algorithm	An algorithm where a set of nodes in a swarm can come to an agreement about decisions that will apply to all nodes in the swarm. E.g. in blockchains, the algorithm that results in what block is considered to be the next official block in the chain, allowing the swarm to stay in sync.
1st-gen blockchain	Blockchain nodes are used for basic numerical accounting or trivial data storage using a shared peer-to-peer protocol in a "trustless" environment. The consensus algorithm is hard coded and relatively primitive. Each node is a "full" node in that it has a complete copy of the blockchain.
2nd-gen blockchain	Expands the Nakamoto blockchain such that participants can store any kind of information, including a virtual machine's complete execution state (e.g. smart contracts on Ethereum). Participants may also elect for more sophisticated consensus protocols, enhancing systemic fairness or reliability. "Sharding" allows nodes to elect to only store portions of the blockchain (i.e. "partial" nodes), offering resource-limited nodes to operate.
3rd-gen blockchain	Characterized by "local-first" (or "offline-first") design where transactions and consensus protocols don't necessarily require unanimous or majority agreement in order for local partitions of a swarm to advance.

Modern Software Functionality & Tradeoffs Compared

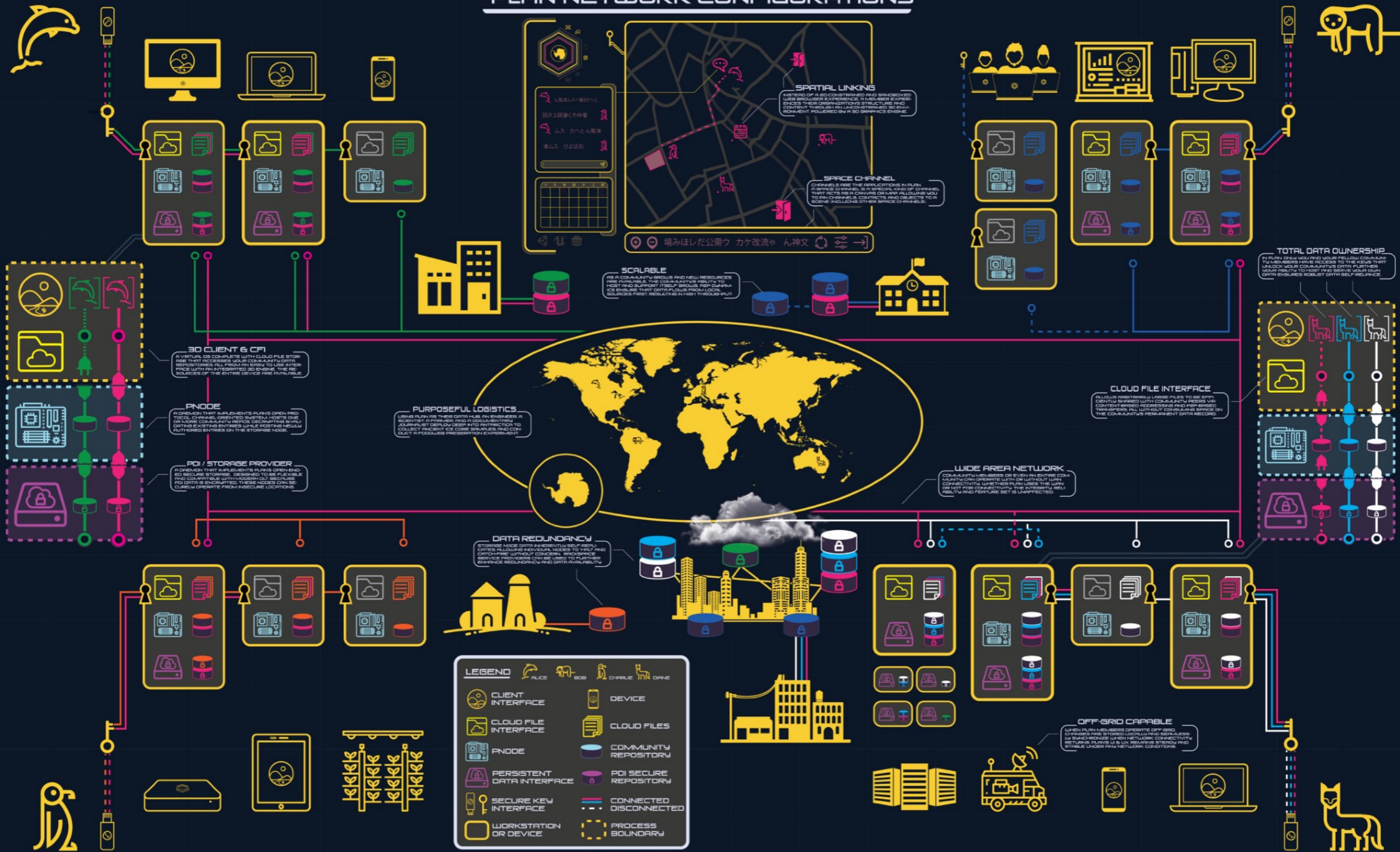| Software Platform(s)	Classification	Total Data Privacy	Total Data Ownership	Community Centric Permissions	Data & Infrastructure Redundancy	Off-Grid First	Intended for Non-Technical Users	Production Ready / Mature	Native Spatial UX	Spatial UX App Support	Hardware Agnostic	Pluggable	Gatekeeperless	License Model	Fee Model
PLAN	Distributed OS & Swarm (p2p)	✅	✅	✅	✅	✅	✅	❌	✅	✅	✅	✅	✅	GPL (Free as in Freedom)	Free
Linux	Device OS	✅	✅	✅	❌	✅	✅	✅	❌	✅	✅	✅	✅	GPL (Free as in Freedom)	Free
Android	Device OS	✅	✅	✅	❌	✅	✅	✅	❌	✅	✅	✅	❌	Apache 2.0	Free
Windows	Device OS	✅	✅	✅	❌	✅	✅	✅	❌	✅	✅	✅	❌	©	Per Seat + Features
macOS	Device OS	✅	✅	✅	❌	✅	✅	✅	❌	✅	❌	✅	❌	©	Hardware
iOS	Device OS	✅	✅	❌	❌	✅	✅	✅	❌	✅	❌	✅	❌	©	Hardware
iCloud	Personal Cloud + Services	❌	❌	❌	✅	❌	✅	✅	❌	❌	❌	❌	❌	©	Freemium / Sub.
MS Office 365	Productivity Suite & Cloud	❌	❌	✅	✅	❌	✅	✅	❌	✅	❌	❌	❌	©	Freemium / Sub.
G-Suite, Google Drive	Productivity Suite & Cloud	❌	❌	✅	✅	❌	✅	✅	❌	✅	✅	❌	❌	©	Freemium / Sub.
Slack	Team Messaging + Services	❌	❌	✅	✅	❌	✅	✅	❌	✅	✅	❌	❌	©	Freemium / Sub.
Amazon Web Services	Web Infrastructure Stack	❌	❌	✅	✅	❌	❌	✅	❌	✅	✅	❌	❌	©	per Volume
FB, Twitter, Instagram	Social Media / Feed-Follower	❌	❌	✅	✅	❌	✅	✅	❌	✅	✅	❌	❌	©	Freemium / Ads
Discord, Telegram	Team Messaging + Files	✅	❌	✅	✅	❌	✅	✅	❌	❌	✅	❌	❌	©	Free
Salesforce	Enterprise CRM	❌	❌	✅	✅	❌	✅	✅	❌	✅	❌	❌	❌	©	Per Seat Subscription
Google Maps	GeoSpatial Data &	❌	❌	❌	✅	✅	✅	✅	✅	❌	✅	❌	❌	©	Freemium / Data Fees
Third-party Email Service	Messaging Service	❌	❌	❌	✅	✅	✅	✅	❌	✅	✅	❌	❌	©	Freemium
Signal, Wckr	Messaging Service	✅	✅	❌	✅	❌	✅	✅	❌	✅	❌	❌	❌	©	Free
Mastadon, cabal	Messaging Service (p2p)	❌	✅	✅	✅	✅	✅❌	✅	❌	✅	✅	✅	✅	mixed	Free
Self-hosted Email	Messaging Protocol	✅❌	✅	❌	❌	✅	❌	✅	❌	❌	✅	✅	✅	n/a	n/a
IRC	Messaging Protocol	✅	✅	✅	n/a	✅	✅	❌	❌	❌	✅	✅	✅	n/a	n/a
Beaker + Dat	Web Infrastructure Stack	✅	✅	✅	✅	✅	❌	❌	❌	✅	✅	✅	✅	MIT	Free
IPFS	File Sharing Protocol	✅	✅	❌	✅	✅	❌	✅	❌	✅	✅	✅	✅	MIT	Free
FalconView + BFT	GeoSpatial Integrated Feeds	n/a	✅	n/a	✅	✅	❌	✅	✅	✅	❌	✅	❌	U.S. DoD only	U.S. DoD only
Unity, Unreal, CryEngine	3D Engine (AAA)	✅	✅	✅	❌	✅	❌	✅	✅	✅	✅	✅	❌	©	Freemium / Fee Cap
GoDot, OGRE	3D Engine (FOSS)	✅	✅	❌	❌	✅	❌	✅	✅	✅	❌	✅	✅	MIT	Free
Hyperledger	Enterprise DLT	✅	✅	✅	✅	✅	❌	✅	❌	❌	✅	✅	✅	Apache 2.0	Free
Holochain, Substrate, IOTA	Instanced DLT	✅	✅	✅	✅	✅	❌	❌	❌	❌	✅	✅	✅	Apache 2.0	Free
Ethereum	Global DLT (Pure Distributed)	✅	✅	✅	✅	❌	❌	✅	❌	❌	✅	✅	✅	mixed	Free
EOS, Cosmos, Polkadot	Global DLT (Validated)	✅	✅	✅	✅	❌	❌	❌	❌	❌	✅	✅	❌	©	Free

Design Principles & Definitions:

Total Data Ownership: Systems and components must provision for assured data accessibility + data non-deniability + data portability

Total Data Privacy: Only the designated owner(s) have permissions authority and cryptographic access to their data

Community Centric Permissions: Supports nesting hierarchies; create/manage accounts + local authority + flexible (user-oriented) governance

Off-Grid First: Data accessible, usable, updatable all without the Internet; Self-contained

Accessibility and Usability: Open protocols that are adaptable for accessibility, usability, and intended for non-technical users

Spatial UX App Support: Integrated/full realtime 3D graphics capability with the full power of the workstation at your disposal

Hardware Agnostic: No technical, legal, or arbitrary restrictions on the number or types of devices

Pluggable & Extensible: Extend functionality natively; designed and offered with the intent that others can freely grow, enhance, or fork the platform

Gatekeeperless: Full source code may be used, modified and distributed—commercially or non-commercially. No third-party needed to deploy, access, or manage data. No costs, fees, or significant dependencies

Distributed Data & Infrastructure Redundancy: Integrated data backup/replication and recovery; concurrency of components, lack of a global clock, and tolerates independent failure of components

Prepared by:
PLAN Systems, © 2020
www.plan-systems.org

Bottom line: the design values of any system show up in both the functionality and limitations of the system. This chart helps us compare industry wide tradeoffs through the lens of our design principles

PLAN NETWORK CONFIGURATIONS

SPATIAL LINKING
INSTEAD OF A 2D-CONSTRAINED AND SANDBOXED WEB BROWSER EXPERIENCE, A MEMBER EXPERIENCES THEIR ORGANIZATION'S STRUCTURE AND CONTENT THROUGH AN UNCONSTRAINED 3D ENVIRONMENT, POWERED BY AN 3D GRAPHICS ENGINE.

SPACE CHANNEL
CHANNELS ARE THE APPLICATIONS IN PLAN. A SPACE CHANNEL IS A SPECIAL KIND OF CHANNEL THAT ACTS AS A CANVAS OR MAP, ALLOWING YOU TO PIN CHANNELS, CONTACTS AND OBJECTS TO A SCENE INCLUDING OTHER SPACE CHANNELS.

SCALABLE
AS A COMMUNITY GROWS AND NEW RESOURCES ARE AVAILABLE, THE COMMUNITY'S ABILITY TO HOST AND SUPPORT ITSELF GROWS. PDI DYNAMICS ENSURE THAT DATA FLOWS FROM LOCAL SOURCES FIRST RESULTING IN HIGH THROUGHPUT.

TOTAL DATA OWNERSHIP
IN PLAN, ONLY YOU AND YOUR FELLOW COMMUNITY MEMBERS HAVE ACCESS TO THE KEYS THAT UNLOCK YOUR COMMUNITY'S DATA. FURTHER YOUR ABILITY TO HOST AND SERVE YOUR OWN DATA ENSURES ROBUST DATA SELF-RELIANCE.

3D CLIENT & CFI
A VIRTUAL OS COMPLETE WITH CLOUD FILE STORAGE THAT ACCESSES YOUR COMMUNITY DATA REPOSITORIES, ALL FROM AN EASY TO USE INTERFACE WITH AN INTEGRATED 3D ENGINE. THE RESOURCES OF THE ENTIRE DEVICE ARE AVAILABLE.

PNODE
A DAEMON THAT IMPLEMENTS PLAN'S OPEN PROTOCOL. CHANNEL-ORIENTED SYSTEM, HOSTS ONE OR MORE COMMUNITY REPOS, DECRYPTING & VALIDATING EXISTING ENTRIES WHILE POSTING NEWLY AUTHORED ENTRIES ON THE STORAGE NODE.

PDI / STORAGE PROVIDER
A DAEMON THAT IMPLEMENTS PLAN'S OPEN-ENDED SECURE STORAGE, DESIGNED TO BE FLEXIBLE AND COMPATIBLE WITH MODERN OUT. BECAUSE PDI DATA IS ENCRYPTED, THESE NODES CAN SECURELY OPERATE FROM INSECURE LOCATIONS.

PURPOSEFUL LOGISTICS
USING PLAN AS THEIR DATA HUB, AN ENGINEER, A SCIENTIST AND A FILMMAKER RING A DOCUMENTARY SCIENTIST DEPLOY DEEP INTO ANTARCTICA TO COLLECT ANCIENT ICE CORE SAMPLES AND CONDUCT A FOG&WEB PRESERVATION EXPERIMENT.

CLOUD FILE INTERFACE
ALLOWS ARBITRARILY LARGE FILES TO BE EFFICIENTLY SHARED WITH COMMUNITY PEERS VIA CONTENT-BASED ADDRESSING AND P2P-BASED TRANSFERS, ALL WITHOUT CONSUMING SPACE ON THE COMMUNITY'S PERMANENT DATA RECORD.

WIDE AREA NETWORK
COMMUNITY MEMBERS OR EVEN AN ENTIRE COMMUNITY CAN OPERATE WITH OR WITHOUT WAN CONNECTIVITY. WHETHER PLAN USES THE WAN OR NOT, CONNECTIVITY, THE INTEGRITY, RELIABILITY AND FEATURE SET IS UNAFFECTED.

DATA REDUNDANCY
STORAGE NODE DATA INHERENTLY SELF-REPLICATES ALLOWING INDIVIDUAL NODES TO FAIL AND CATCH-UP WITHOUT CONCERN. BACKGROUND SERVICE PROVIDERS CAN BE USED TO FURTHER ENHANCE REDUNDANCY AND DATA AVAILABILITY.

OFF-GRID CAPABLE
WHEN PLAN MEMBERS OPERATE OFF-GRID, CHANNELS ARE STORED LOCALLY AND SEAMLESSLY SYNCHRONIZE WHEN NETWORK CONNECTIVITY RETURNS. PLAN'S UI & UX REMAINS STEADY AND STABLE UNDER ANY NETWORK CONDITIONS.

PLAN SYSTEMS NARRATIVE 1023

APPLICATION FOR RECOGNITION OF TAX EXEMPTION

PLAN Systems
Austin, Texas 78723
Contact: info@plan-systems.org

IRS Headnote:

An organization providing services that are beneficial to the public interest, providing relief of the poor, the distressed, or the underprivileged, and helping improve educational and scientific programs, may be exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code of 1954.

Section 1: Background, Purpose, and Activities

A. Introduction: PLAN Systems was incorporated as a non-profit, public charity corporation in the State of Texas on May 22, 2018. A verifiable and correct copy of the organization's Articles of Incorporation, certified by the Texas Secretary of State, along with a copy of its Bylaws are attached hereto as Exhibit A and Exhibit B, respectively.

B. Background: The ARPANET, originally a Department of Defense project, sought to harness new advancements in information technology for national security related objectives, and to improve tactical decision making; specifically as it relates to the survivability of people, communications, and resources in a wartime, crisis, or humanitarian situation. As the project evolved in direction and scope, individuals such as Program Director J.C.R. Licklider envisioned the availability of these tools, not just for research and defense, but as "a general-purpose network that could be used for as many decision-support purposes as its users had the imagination to conceive" (Exhibit C, link 4). Over time, the Internet has become a network of networks, where different enterprises, institutions, and organizations can communicate and exchange data. With the 1990s
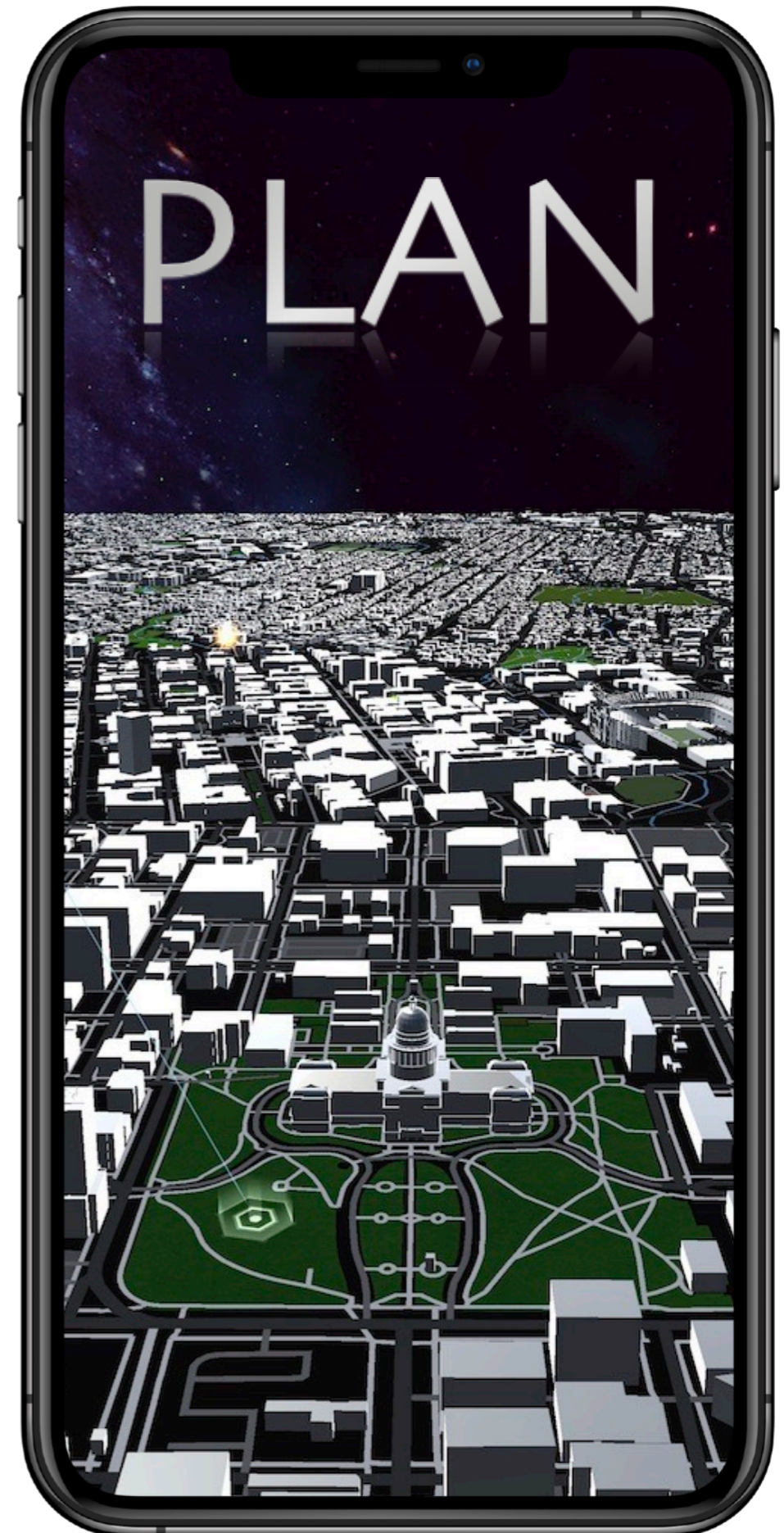
came HTTP, a powerful and open-ended content protocol that ushered in a new standard of client-browser-server interoperability. This interoperability of the Internet has become wholly essential to nearly every aspect of human activity, including business, commerce, research, education, news, defense, and day-to-day interactions. Even individual and brand identity has come to rely on, and be defined by having an internet-presence.

In 2003, when the Mozilla Foundation was approved as a 501(c)(3) charitable foundation, the narrative attachment in their application thoughtfully conveyed that the universality of technology, such as email and the Web, are "the foundation of the information economy and, more generally, of the information society" (Exhibit C, link 3). The Mozilla Foundation also points out that the interoperability of computers and networks continue to depend on open-source software projects. Such projects and organizations define and work to enshrine the communications standards and protocols that are necessary to "allow diverse computer networks, whether operated by government agencies, academic institutions, or commercial enterprises, to interact with each other" (Exhibit C, link 3).

PLAN was (unofficially) started in early 2018 when former Naval submarine officer and software engineer Andrew O'Meara, and USAF veteran and senior intel analyst Brandon Wallace concluded that all the necessary open source protocols and relevant technologies were available to create a new kind of Community Operating System – a decentralized, open source software platform that leverages a powerful plugin architecture, a modern visual interface, along with integrated tools and communications protocols that are secure, "serverless", and universally accessible. At the heart of the platform are revolutionary technologies: the utility blockchain and distributed computing architecture. As an example of how an immutable, append-only data archive (blockchain) can be an important archival utility, in 2013 Harvard Law conducted a review of SCOTUS Opinions and found that roughly half (49%) of hyperlinks that were provided by the court for contextualizing the Opinions were broken (attached as Exhibit C, link 6). By contrast, an append-only ledger that is distributed across a broad peer network assures redundancy, persistence, and availability of critical information, thanks to the benefits of public-private key encryption. These benefits explicitly prevent accidental or intentional tampering of published files or information.

In many ways, blockchain and distributed technologies are a callback to the rise of microcomputers in the 1980's. At the time, engineers were enamored with their potential and utility. However, graphical user interfaces had to be developed in order for non-technical users to benefit from these new open-ended computing tools. Back then, command-line interfaces were the primary means for interacting with programs and file systems. Today, distributed technologies and protocols offer astonishing potential, but they lack a consistent and unifying graphical user experience. Distributed blockchain and "serverless" cloud technologies are ready to be integrated into an accessible, unified visual interface that supports human communications, and isn't easily compromised by spam, third-party interests, or malicious actors.

C. Exempt Purpose of the Organization. PLAN Systems is organized and shall be operated for charitable, scientific, and educational purposes, including: To research, develop, deploy technology solutions that overcome significant challenges in human communications, logistics, and self-organization; To train and educate organizations and communities about PLAN technology and its benefits. The organization is committed to:

1. Develop technology solutions that allow collaborative planning and organization, especially for those in crisis or low-resource conditions;

2. Contribute to the continued innovation of open protocols and interoperability of Internet-era technologies;

3. Encourage digital self-reliance by providing an open and adaptable alternative to commercial software platforms;

Specifically, the organization's exempt purpose is to:

(a) develop and maintain the source code for Free and Open Source Software that brings together essential communications and planning tools designed to be secure, easy to use, offline-first, installable on last-generation hardware, and accessible to everyone; (b) provide communities, civic institutions, educators, hospitals, entrepreneurs, content producers, and organizations with the tools and necessary documentation to manage communications, time, decisions, and resources. Since the organization's mission is the development of public-benefitting technology, its tax exempt status will help direct donations, proceeds, and exemptions into its focus area.

By undertaking the following **Key Activities**, the organization will help ensure that tools for human communications are always free and publicly available. Recognizing the underlying value to the public of having reliable, secure and redundant communications, especially in emergency situations, this charter seeks to protect the universality of technologies such as blockchain, IPFS, IRC, email, HTTP, VOIP, RSS, TCP/IP, and many other efforts which are the foundations of a free and open Internet. Additional details about the organization, including use cases, design principles, and roadmap, attached hereto as Exhibit E: Orientation & Development Roadmap.

D. Key Activities. The organization, will engage in the following activities, pursuant to its exempt purpose and within the meaning of U.S. code 501(c)(3):

D1. Lead the development of an open source communications and logistics planning platform, and other software tools that are (a) founded on Free and Open Source Software principles; (b) available for anyone to download, use, and/or help develop; (c) implemented with open protocols and standards with an extensible architecture, so independent developers can easily craft tools and extensions that are interoperable with each other; (d) capable of not only browsing the Internet, but also providing advanced information management capabilities, such as rich messaging, secure and offline communications, data visualizations, environment/network mapping, file storage, and network management tools; thus reducing the

dependency on costly, maintenance prone, and less reliable technologies. An overview of Free and Open Source Software principles are attached hereto in Exhibit C, link 9. The organization will spend an estimated 40% of its time on this activity.

D2. Facilitate the adoption and utilization of PLAN technologies by community organizations, open source projects, low-income populations, independent developers, small businesses, education institutes, and government departments alike, as the digital infrastructure and organizational tools for their projects and activities. PLAN technical support and development services will be available free of change to open source projects, low-income populations, and organizations that have limited resources and demonstrate a significant need, including: custom development, technology and hardware solutions consultation, installation/set-up services, technical support/training, and skill development workshops. The organization will spend an estimated 20% of its time on this activity.

D3. Train, educate, and provide documentation for all of the above-mentioned technologies pursuant to the organization's exempt purpose, with the goal of: (a) making PLAN as accessible for non-technical users as possible; (b) informing the public about the open source protocols and software tools that are available; and (c) promoting PLAN software to the public through media, meetings, events, and campaigns. The organization will spend an estimated 10% of its time on this activity.

D4. Establish and maintain a Center for technology, research, collaboration, and innovation in Central Texas. The Center will be organized and operated as a model practical-use-case for the organization's software, and will contain associated equipment and facilities. The organization will organize this multi-use and inclusive space to affordably provide the tools, guiding support, and resources which encourage human communications, co-creation, and face-to-face interactions for committed artisans, researchers, designers, entrepreneurs, and inventors. The center will exist to foster skills and development within the surrounding community by allowing cross-

discipline collaboration and participation in a creative and supportive environment. Facilities, tools, and training will be made freely available to low-income individuals and communities. The organization's overarching goal for the center is to facilitate collaborations that lead to new inventions, inspiring creations, businesses, and community resiliency. The organization will spend an estimated 20% of its time on this activity.

D5. Participate in digital standards and open protocol development efforts that support the organization's exempt purpose. The organization will spend an estimated 10% of its time on this activity.

E. Specific Undertakings

E1. <u>Specific Actions Undertaken to Support the activities presented in parts D1-D2</u>

- Develop open source software

- Work directly with distressed or low-income populations to help solve or alleviate significant humanitarian challenges

- License and make PLAN software freely available to all via the GNU General Public License (GPLv3), consistent with the organization's exempt purpose

- Gain and maintain the facilities necessary for developers to improve the code base, along with a repository of tools and code that allows for collaborative development

- Host a forum where developers can collaborate and contribute to open source projects

- Lead the integration strategy of new developments and technology into the official PLAN open technology stack, while also providing the technical standards for the architecture

- The organization may charge fees considered fair and reasonable for custom PLAN technology solutions licensed to organizations or businesses in projects that are aligned with the organization's organizing purpose. Technologies and solutions that are developed will be integrated into the PLAN technology stack and made available for free

- The organization may choose to outsource tasks and activities when it is cost effective to the organization or deemed by the board to be technically necessary

- Obtain appropriate patents, consultation, and legal assistance to ensure PLAN software and its derivatives remain free and open to all in perpetuity

E2. <u>Additional Specific Actions Undertaken to Support Activities in D1</u>

- Because of the well-known difficulties that people have with adopting new software, the organization recognizes that it is necessary to provide a variety of flexible technical assistance options

that are available to the general public, for free whenever possible; this includes online community forums, ticket-based, phone, and/or direct-message support. The organization does not anticipate generating significant revenue from this activity.

- Additional engineering and technology consulting fees will be billed hourly, at a fair market rate; all projects, proceeds, and resulting technologies will conform to the tax-exempt purpose of the organization. The organization anticipates generating modest revenue from this activity.

- The organization will create and document the process for employing hardware kits and encryption devices (e.g. USB or bluetooth dongle, pre-configured computers) that take advantage of PLAN's open, industry-standard security protocols. This not only enhances the physical security of devices running PLAN software, it supports one-time or periodic in-person key exchanges that produce verifiable signatures offering unforgeable digital chains of accountability

- The organization will orchestrate the development and distribution of additional hardware and encryption solutions (such as a USB drive, or custom hardware kits), which are designed for and come with PLAN software and relevant documentation. All hardware solutions include a commensurate fee, in order to recover production costs and as a mechanism to allow individuals and organizations to further support the organization's exempt purpose. This fee is considered a novelty and convenience for dedicated contributors, as anyone can install the open source software that we provide directly on their privately owned thumb-drive or computing devices.

E3. Additional Specific Actions Undertaken to Support Activities in D2

- The organization will provide the PLAN software name and trademarks to organizations (royalty-free) in connection with their local projects and open source software applications that adapt to the PLAN architecture (e.g., PLAN Texas State Parks, PLAN Ethereum).

- Decentralize the adoption and support of PLAN by documenting and providing information to a distributed network of PLAN developers, administrators, and consultants that are established sole-proprietors, LLCs, Corporations., or other non-profit organizations.

E4. Specific Actions Undertaken to Support the activities in D3

- Lead the creation of documentation, technical standards, and training materials

- Establish and maintain the facilities required to prepare and disseminate documentation

- Create and incorporate multimedia (documents, graphics, video) that provides a rich source of information and instructions on the organization's software solutions

- Provide the organization's organizing documents, it's codebase, and financial records hosted on an immutable and persistent PLAN community data-storage portal, and accessible to the general public to access, replicate, and distribute

- Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training

E5. Specific Actions Undertaken to Support Activities in D4

- Procure facilities necessary to support a Center for technology

- Facilitate seminars, classes, technical training, and mentorship programs available to the regional Austin community — made freely available to low-income / low-resource populations

- Procure and manage an inventory of tools, computers, and hardware equipment to support community self-help projects, entrepreneurship, and artistic endeavors

- Manage the maintenance, repair, and upkeep of equipment available for use to trained and certified members of the community

- Train, certify, and manage appropriate access to all facilities and equipment

- Charge a fair and reasonable monthly rate that helps pay for the maintenance, equipment, and personnel necessary to run the facility

- Manage a schedule of availability for organization tools, workshops, classes, events and activities

E6. Specific Actions Undertaken to Support the activities in D5

- Maintain an outreach and advisory program that works with PLAN developers and administrators to ensure standards compliance

- Work with other standards organizations and attend events that further the organization's tax exempt purpose

- Establish a community feedback (voting) mechanism using forthcoming PLAN software in order to inform development decisions

https://github.com/plan-systems
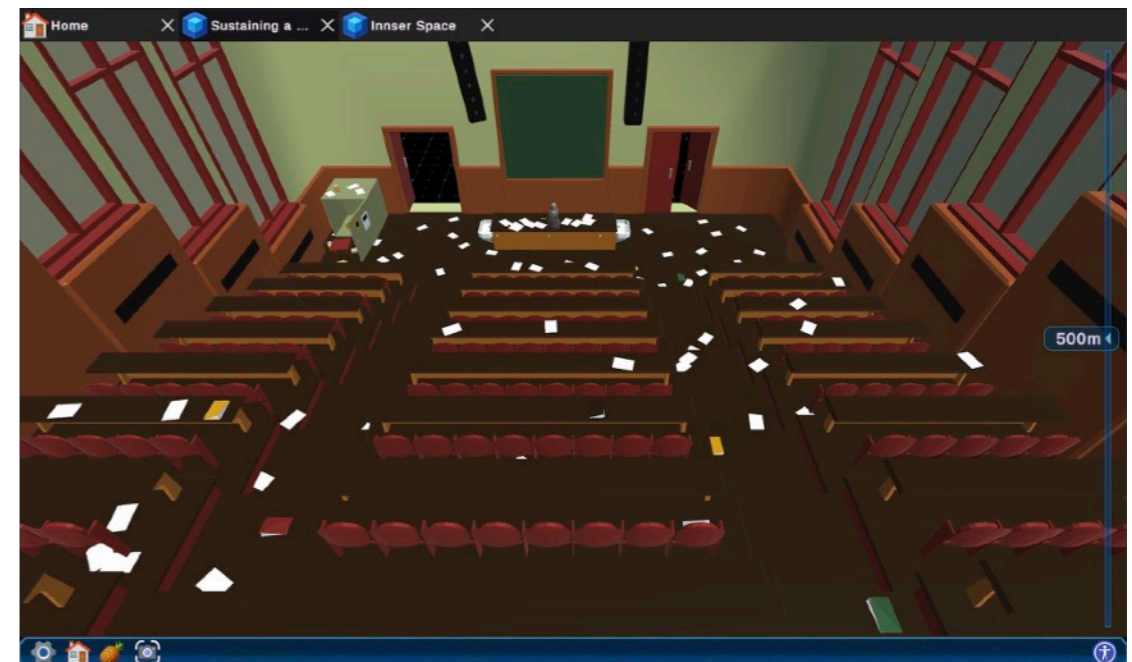
Director and Officer Biographies

Drew O'Meara

Once a U.S. nuclear submarine officer and a student of computer science at Cornell University, Drew has served as CTO of SoundSpectrum, an audio visualization software company that has shipped software for over 17 years, including licensing software to Apple Inc. and authoring U.S. patent 9971632. He is an expert level designer and engineer of real-time 3D graphics, data visualization, computation, p2p and distributed systems architectures. Drew is the Technical Director and Chief Architect of PLAN -- from infrastructure to interfaces. He is a passionate advocate for community-centric FOSS technologies.

Brandon Wallace

A veteran USAF senior analyst with foundational experience in developing and maintaining mission critical information systems, including for Contingency Response, Search and Rescue, Medical Evacuation teams, and Executive Officers. Brandon went on to attend UT Austin, graduating with honors while engaging in cross-discipline studies in communications, sustainability, and environmental geography. He specializes in information systems, 3D content design, multi-media production, developing organizational solutions, and geo-spatial planning. Brandon is the President of PLAN Systems, with a mission to foster human communications and relationships.

Jeff Garrard

A 30 year veteran of digital media industries, Jeff currently works as a portfolio manager for Blackbaud, Inc., the leading software company that powers the largest non-profit organizations in the U.S. Jeff graduated with honors from the University of Texas with a degree in Communications. He worked at CNN as a science and technology writer and producer, then went on to lead the launch of CNN.com as Executive Producer. His skills are focused on processes and operations in leveraging Software as a Service (SaaS). From software deployment to organization development, Jeff provides critical insights as Organization Development Director.

Tim Gross

A serial startup software engineer and systems development advisor. Tim has been a developer advocate, engineering manager, and dev ops engineer, with deep systems security experience. As an independent consultant for engineering teams at startups and fledgling non-profits alike, Tim excels at practical implementation and maintenance of complex systems. He also has experience with safety-sensitive projects and designing buildings. Tim is the Build Operations Engineer for PLAN Systems, and is assisting with the implementation of core P2P components of the PLAN infrastructure.

Activities will be carried out primarily in Austin Texas, by the Directors and Officers named above, along with volunteers who contribute time and resources to the organizing purpose, as their schedule and availability permits. Director and Officer biographies are attached hereto as Exhibit D. Upon authoring a prototype and obtaining seed funding, the founding Directors will begin staffing the full-time positions outlined below in Exhibit F.3, Positions and Organization Structure.

The organization's directors have been invited to serve on the Board because of their unique capabilities and significant experience both inside and outside software and technology industries, to help ensure the continued development and growth of the organization. Directors will not be compensated for the services they provide to the organization in their capacity as Board Members, but are eligible to hold one or more positions within the organization. When it becomes necessary to add or replace Directors, the organization intends to continue inviting individuals that are representative of the community, and maintain special knowledge or skills that are particularly suited for assisting the organization in advancing its tax exempt purpose.

Foreign Activities

In general, the organization's foreign activities involve facilitating the broad adoption of PLAN software and integrated protocols by collaborating with organizations outside of the United States that are structured and operated correspondingly to the organization's exempt purpose (in person and digitally). For example, the organization may assist in providing technical direction to organizations that exemplify such use-cases as stated in Exhibit E, Orientation and Development Roadmap. Foreign activities will be organized under the following categories: assisted implementation, training and education, or humanitarian support.

Foreign assisted implementation includes providing direct technical and administrative support to organizations and communities that share a similar purpose and structure as the organization, pursuant to U.S. code 501(c)(3).

Foreign training and education includes leading and/or taking part in lectures, classes, creating documentation, and in-field training with organizations or individuals, as detailed in our Narrative of Activities, Section 1, D3.

Foreign humanitarian support includes all efforts to provide software tools and technology solutions to aid organizations and individuals with the mutual interest of providing relief to the poor, the distressed, or the underprivileged.

Financial Data

The organization's primary source of income and financial support derives from donations and grants from the general public, non-profit organizations, government agencies, businesses, trade associations, and community groups. The organization disposes its income through the Board of Directors or through the decisions of the duly elected Chief Financial Officer, whose power to pay expenses is set out by the board or the organization's bylaws in accordance with the organization's purpose. The organization's forecasted three year budget and expenses and the Bylaws are attached hereto as Exhibit F, and Exhibit B respectively.

The organization will use it's staff, directors, and individuals active in the organization to solicit individual and corporate contributions via mail, email, phone, crowd-funding, and personal solicitations, and will devote a page on its website to soliciting and processing tax-deductible donations. The organization will also seek out and submit proposals to grant sources that further the exempt purpose of the organization.

The organization will conduct its own fundraising in each of the 50 states and the District of Columbia, and intends to comply will all applicable state and local fundraising laws and regulations. The organization does not intend to fundraise for other organizations.

Exhibit F

The organization anticipates generating additional revenue by charging fees to expedite the development of specific features and functionality of PLAN software, in order to support large institutions, organizations, or groups of people with significant need – such as assisting a business with a technology solution which significantly expands the PLAN user base. Such code expansion will only be undertaken under the following circumstances: the code expansion is in accordance with the organization's exempt purpose, the resulting functionality is appropriate for and releasable to the general public, the resulting product will be released publicly for free.

The organization will solicit ongoing, open ended, and inclusive feedback from the PLAN community and general public on feature requests and enhancements that support the tax exempt purpose. The organization will incorporate this feedback into ongoing internal software development or use feedback and surveys as a basis to conduct fundraising for the explicit purpose of implementing community-requested features and enhancements. The organization anticipates generating modest revenue from providing technical support, administrative consulting, and by providing hardware solutions to the general public (as outlined above in Section 1, E2), in accordance with the organization's tax exempt purpose.

Assets and Liabilities:

PLAN Systems Assets   Exhibit F.1

- PLAN GNU General Public License (GPLv3)

- Computers for development efforts and to host source code, IP, website, and associated documentation

- Rights to the materials on the PLAN Website at http://plan-systems.org

- Rights to the materials on the PLAN Github repository at https://github.com/plan-systems.org/

- PLAN trademarks

PLAN Systems Liabilities

The organization has accrued zero in debt and liabilities, and currently operates on volunteer support and equipment.

ARTICLES OF INCORPORATION

Restated Certificate of Formation
of

PLAN Systems
A Nonprofit Corporation

This Restated Certificate of Formation is submitted for filing pursuant to Section 3.059 of the Texas Business Organizations Code. This Restated Certificate of Formation restates the original certificate of formation.

Article 1.
Entity Name and Type

The name of the entity as currently shown in the records of the Secretary of State and the type of filing entity is PLAN Foundation a Texas nonprofit corporation. The amended name of the entity is PLAN Systems. The Corporation's date of formation is 04/26, 2018 and its assigned file number is 803007076

Article 2.
Registered Agent and Registered Office

The Corporation's registered agent is Brandon Wallace. The street address of the registered agent is _____ File #: 803007076 ___ The registered address of the Corporation is _____ Austin Tx. 78723. The registered agent has consented to the appointment in writing pursuant to Section 5.201(b) of the Texas Business Organizations Code. The written consent shall be maintained in the Corporation's records.

Article 3.
Management

The management of the Corporation is vested in its Board of Directors and such committees of the board that the board may, from time-to-time, establish. The bylaws will provide the qualifications, manner of selection, duties, terms, and other matters relating to the Board of Directors. Such directors shall hold office in accordance with the bylaws of the Corporation. The number of directors may be increased or decreased by amending the bylaws of the Corporation. The number of directors may not be decreased to less than three (3). The number of directors constituting the initial Board of Directors and the names and addresses of the persons who are to serve as directors until the organizational meeting of the board or until their successors are elected and qualified are as follows:

Name	Directors	Address
Brandon D. Wallace	President	
Jeff Garrard	Secretary	Austin Tx. 78723
Andrew O'Meara	Board Member	

Article 4.
Membership

The Corporation shall have no members.

Article 5.
Purposes

The Corporation is organized and shall be operated for charitable, scientific, and educational purposes, including: To research, develop, deploy technology solutions that overcome significant challenges in human communications, logistics, and self-organization; To train and educate organizations and communities about PLAN technology and its benefits.

The Corporation is organized exclusively for charitable, education, and scientific purposes, including, for such purposes, the making of distributions to organizations that qualify as exempt organizations under section 501(c)(3) of the Internal Revenue Code, or the corresponding section of any future federal tax code. Subject to the foregoing, the Corporation may engage in any lawful activity for which non-profit corporations may be formed under the Texas Business Organizations Code.

Article 6.
Amendments

(1) These Restated Articles accurately copy the Original Articles and all amendments thereto in effect as of the date hereof, without substantive change except as follows:

   (a) *Article 1 – Name, has been amended to* PLAN Systems
   (b) *Article 5 – Purposes, has been amended*
   (c) *Article 7 - Additional Restrictions and Requirements, has been added*

(2) Each of the amendments contained in these Restated Articles have been effected in accordance with the requirements of the Texas Business Organizations Code and the Corporation's governing documents. The board of directors of the Corporation unanimously approved the amendments and these Restated Articles.

(3) This Restated Certificate of Formation becomes effective upon filing with the Texas Secretary of State.

Article 7.
Restrictions and Requirements

No Private Inurement: No part of the net earnings of the Corporation shall inure to the benefit of, or be distributable to its members, trustees, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in this Restated Certificate of Formation.

No Prohibited Activities: No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office. Notwithstanding any other provision of these articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code, or the corresponding section of any future federal tax code, or (b) by a corporation, contributions to which

are deductible under section 170(c)(2) of the Internal Revenue Code, or the corresponding section of any future federal tax code.

Dissolution: The Corporation is a Texas nonprofit corporation. Upon dissolution of the Corporation, all of its assets will be distributed an organization exempt from taxes under Internal Revenue Code Section 501(c)(3) for one or more purposes exempt under the Texas franchise tax.

Article 8.
Execution

The undersigned affirms that the person designated as registered agent in the restated certificate of formation has consented to the appointment. The undersigned signs this document subject to the penalties imposed by law for the submission of a materially false or fraudulent instrument and certifies under penalty of perjury that the undersigned is authorized under the provisions of law governing the entity to execute the filing instrument.

Date: 11 / 30 / 2018

Name of entity: PLAN Systems

Signature of authorized individual: _____

Printed or typed name of authorized individual: Brandon D. Wallace

---

Corporations Section
P.O.Box 13697
Austin, Texas 78711-3697

Rolando B. Pablos
Secretary of State

Office of the Secretary of State

CERTIFICATE OF FILING
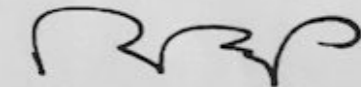### OF

PLAN Foundation
File Number: 803007076

The undersigned, as Secretary of State of Texas, hereby certifies that a Certificate of Formation for the above named Domestic Nonprofit Corporation has been received in this office and has been found to conform to the applicable provisions of law.

ACCORDINGLY, the undersigned, as Secretary of State, and by virtue of the authority vested in the secretary by law, hereby issues this certificate evidencing filing effective on the date shown below.

The issuance of this certificate does not authorize the use of a name in this state in violation of the rights of another under the federal Trademark Act of 1946, the Texas trademark law, the Assumed Business or Professional Name Act, or the common law.

Dated: 04/26/2018

Effective: 04/26/2018

Rolando B. Pablos
Secretary of State

BIBLIOGRAPHY

1. PLAN Systems, 2018 Website: http://plan-systems.org

2. PLAN Github Repository: https://github.com/plan-systems/

3. PLAN Systems, 2018: http://plan-systems.org/docs/plan-textbook.pdf

4. Mozilla, 2003: 1023 Part IV Narrative https://static.mozilla.com/foundation/documents/mf-irs-501c3-application-attachment.pdf

5. S. Lukasik, 2011: Why the ARPANET Was Built (Computer.org) https://www.computer.org/cms/ComputingNow/computingthen/2011/03/CT-Arpanet.pdf

6. Zittrain, Jonathan L. and Albert, Kendra and Lessig, Lawrence, Perma: Scoping and Addressing the Problem of Link and Reference Rot in Legal Citations (October 1, 2013). Harvard Public Law Working Paper No. 13-42. Available at SSRN: https://ssrn.com/abstract=2329161 or http://dx.doi.org/10.2139/ssrn.2329161

7. A. Hickey, 2017: 5 of the largest data breaches in recent history — and 4 more you forgot

https://www.ciodive.com/news/worst-data-breaches-yahoo-equifax-irs-opm-anthem-ashley-madison/507124/

8. GNU Operating System and the Free Software Foundation, 2018: What is free software?

https://www.gnu.org/philosophy/free-sw.en.html

9. FOSS/FLOSS Principles and Philosophy

https://www.gnu.org/philosophy/floss-and-foss.en.html, https://www.gnu.org/philosophy/philosophy.html

Contact PLAN Systems at:
info@plan-systems.org | 512-553-8644 | 2019 Edition 1.2

Exhibits Overview

Exhibit A: Articles of Incorporation
Exhibit B: PLAN Bylaws
Exhibit C: Bibliography
Exhibit D: Director and Officer Biographies
Exhibit E: Development Roadmap / Scenarios
Exhibit F: Financial Documentation

Exhibit C