“AI-Agents Need Love Too”

A Framework for an AI-Agent Network & AI Agents that are Aligned with Humanity

Delysium

Authors: XK, Yannick M. v. Draanen, Quan Fan, Jerry Zhang, Yuchu

27 Oct. 2023

Next
Abstract

Last modified 26d ago

Abstract

Delysium presents a streamlined architecture to underpin an advanced AI-Agent Network and supporting ecosystem with a focus on ensuring security, scalability, and high-speed communication. The structure of this ecosystem is simplified into two primary layers: the Communication Layer, also referred to as the **Fundamental Layer**, and the **Blockchain Layer**. The broader ecosystem, encompassing the community, development and interaction of AI Agents, is integrated within these layers.

The Communication Layer, or Fundamental Layer, is the backbone of the network, providing a secure and scalable infrastructure that enables swift and efficient communication among AI Agents. This layer incorporates a suite of unified communication protocols that standardize interactions, service discovery, interface definitions, and addressing systems, all supported by comprehensive software development kits (SDKs) for easy integration.

The Blockchain Layer serves as the governance core, ensuring ethical behavior of agents and trustworthiness of services, while also offering user control interfaces. It employs blockchain technology to bring transparency and decentralization to the ecosystem, facilitating open access to data and reinforcing trust through source verification.

Identity verification is pivotal within the framework, providing accountability for both agents and users with traceable actions. This is achieved through the implementation of **Agent-ID**, a unique identifier for each AI agent, and **Intelligent Contracts**, which are blockchain-enforced agreements that dictate the terms of agent interaction and operation within the network. Both elements are crucial for ensuring that authorization is systematically enforced for agents joining the network.

The Delysium ecosystem also boasts a distinctive feature of upgradability, allowing for the continuous evolution of behaviors and protocols without disrupting the network's live operations.

This white paper outlines the foundation of an ecosystem that is designed to support the seamless growth and interaction of AI Agents, fostering a community that thrives on innovation and collaboration.

Previous
“AI-Agents Need Love Too”

Next
Introduction

Introduction

“An autonomous agent is a system situated within and a part of an environment that senses that environment and acts on it, over time, in pursuit of its own agenda and so as to effect what it senses in the future.”

-Franklin and Graesser (1997)

Artificial Intelligence (AI) Agents have been a talking point in the AI and research communities due to their potential in advancing towards Artificial General Intelligence (AGI), where machines can perform any intellectual task that humans can. Unlike software, AI Agents are engineered to execute tasks autonomously, adapting to new data and changes.

Historically, these agents operated under simplistic policies within constrained environments, contrasting the complex social and business networking humans engage in to gather insights across diverse environments. The conventional agent frameworks thus fall short in mirroring the sophisticated human-level decision processes that emerge through expansive learning, collaboration, and communication. This is particularly evident in open-domain, unconstrained settings outside of narrow training environments.

Early dialogues in the Bitcoin community broached the topic of autonomous agents, paving the way towards envisioning self-sustaining entities capable of autonomously conducting economic transactions. A significant highlight from these discussions was the illustration of StorJ, a decentralized file storage system. Within this framework, an autonomous agent could offer storage services in exchange for Bitcoins, covering its operational costs and potentially replicating itself if deemed profitable enough, thereby exemplifying a self-sustaining, decentralized autonomous agent [1].

This concept was further elucidated by Mike Hearn during his talk at the Turing Festival 2013, where he ventured into a speculative domain of self-owning vehicles operating as autonomous agents. According to Hearn, these vehicles, empowered by the decentralized financial infrastructure provided by Bitcoin, could offer transportation services to earn revenue, cover their operational and maintenance costs, and even generate 'offspring' vehicles by allocating a portion of their earnings to manufacture new vehicles. These new vehicles, carrying a copy of the original vehicle's software, could then enter the market as independent entities, contributing to a self-propagating fleet of autonomous agents.

Hearn's vision painted a picture of a novel economic ecosystem where autonomous agents, embodied as self-owning vehicles, interact with human actors and other agents in a shared economic landscape. He underscored that while these agents are not artificial intelligences, they represent a form of artificial life propelled by economic dynamics and enabled by the absence of financial intermediaries, courtesy of Bitcoin's decentralized nature.

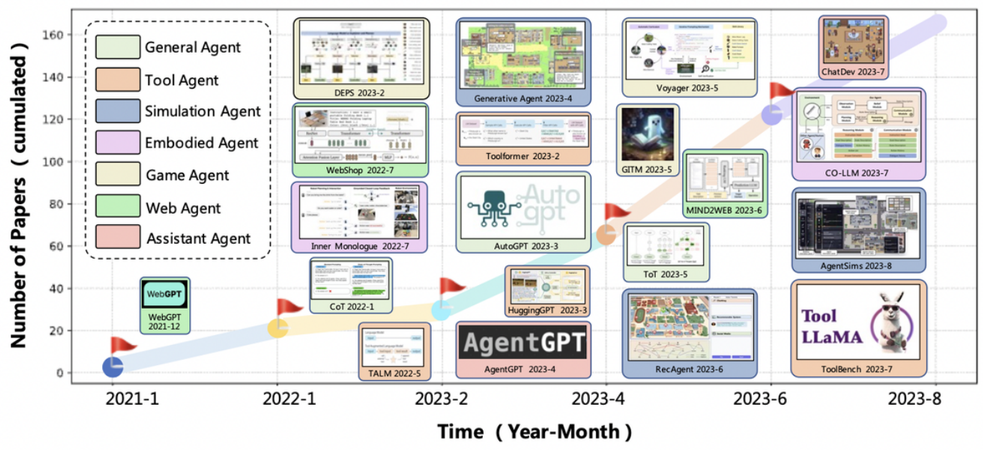


Figure 1 (“A Survey on Large Language Model based Autonomous Agents” #)

The advent of Large Language Models (LLMs) marks a milestone, displaying promise in achieving human-like intelligence through extensive training and parameters. LLMs serve as controllers in constructing autonomous agents, aiming for beyond human-like competencies. Research underscores LLMs' pivotal role in enhancing agent capabilities, depicted in the growth trend of LLM-based autonomous agents (Figure 1: “A Survey on Large Language Model based Autonomous Agents” #).

Amidst the evolving landscape of artificial intelligence, Delysium stands out with its innovative framework designed to support a scalable network of AI agents. The architecture of Delysium is streamlined into two primary layers: the Fundamental Layer and the Blockchain Layer, with the overarching ecosystem fostering growth and collaboration.

The Fundamental Layer, also referred to as the Communication Layer, is the backbone of the network, ensuring scalability and facilitating seamless communication among AI agents. This layer is crucial for the real-time exchange of information and coordination between agents, providing a robust foundation for their operations.

The Blockchain Layer offers a secure and transparent platform for AI agents. This layer enhances governance through consensus mechanisms and resource management, ensuring that agent actions are accountable and aligned with the network's protocols.

The ecosystem of Delysium, which encompasses both layers, is a dynamic environment that promotes the discovery and interaction of diverse AI agents and users. It is designed to support the continuous growth of the AI Agent Network and the community, fostering an inclusive space for innovation and development.

By focusing on these core layers and the ecosystem, Delysium addresses the critical need for networks that can efficiently manage a growing number of AI agents and tasks. The integration of blockchain technology within this framework provides the added benefits of enhanced security, transparency, and consensus-based governance, which are essential for maintaining alignment with human values and objectives.

This whitepaper delves into the intricacies of Delysium's architecture, exploring the capabilities and potential of the AI-Agent network and the strategic integration of blockchain technology. It aims to provide a clear understanding of how Delysium's framework is poised to advance AI-Agent networks, driving them towards greater effectiveness and expansion.

Previous
Abstract

Next
Opportunity Analysis

Opportunity Analysis

The trajectory of AI and autonomous agents is set to redefine the landscape of daily life and business operations over the next few decades. Recent developments signal an era where AI agents become as fundamental as electricity is today. Here's an in-depth look at the opportunities that lie ahead:

1. **Market Growth:**

- The global artificial intelligence market size was valued at USD 136.55 billion in 2022 (1).
- By 2027, the AI market is projected to reach USD 407 billion, a significant leap from its estimated value of USD 136.55 billion in 2022(2).
- The market size for AI is anticipated to hit around USD 2,575.16 billion by 2032, with a CAGR of 19% from 2023 to 2032(3).

2. **Customer Experience:**

- 73% of businesses are adopting or planning to adopt AI chatbots for customer service.
- AI is streamlining customer interactions and automating complex tasks, enhancing the payments experience.

3. **Business Productivity:**

- AI is now integral to boosting revenue, improving customer experiences, and driving business efficiency.
- Smart AI programs are essential for informed decision-making and strategic business growth.

These projections show a significant expansion in the AI and autonomous agents market, reflecting the escalating integration and reliance on AI technologies across various sectors. However, the exact number of AI agents and their deployment isn't distinctly provided in the available data.

The envisioned growth in AI agents could be propelled by advancements in technology, increased investment, and the evolving needs of various industries for intelligent, autonomous systems. It's plausible that with this growth, AI agents will permeate numerous aspects of daily life and business operations, driving efficiency, and enabling new capabilities.

In 30 to 40 years, the seamless integration of AI agents in various sectors, as propelled by the projected growth trends, could significantly alter our interaction with the world and with each other. The ubiquitous nature of AI agents may become similar to the indispensability of electricity in today's world. Every aspect of daily life, from home management to industrial operations, might be optimized and managed by AI agents, potentially averting issues before they materialize, thus ensuring a smoother, more efficient existence for individuals and communities.

The necessity for real-time decision-making in sectors such as finance, healthcare, and transportation could be proficiently addressed by AI agent networks. Their ability to process vast streams of data instantaneously may lead to more efficient financial markets, quicker and more accurate medical diagnoses, and safer, more reliable transportation systems.

As global resources are finite and population numbers continue to swell, resource optimization could become a critical concern. AI agents could play a transformative role in managing and allocating these resources efficiently, from energy to food supply chains, thereby promoting sustainability and minimizing waste.

On a grander scale, AI agent networks could become the cornerstone of global communication and coordination, overcoming language and geographic barriers to foster international collaborations. This could catalyze collective solutions to global challenges such as climate change and pandemics. The evolution of education could also be fast-tracked by AI agents, with personalized learning paths becoming the norm, thereby making education more engaging and effective for individuals.

Security in an increasingly digital realm could be fortified by robust AI agent networks that continuously monitor and counter potential cyber threats, ensuring the safety of data and systems. Furthermore, AI agents could democratize expertise by providing personalized advice and assistance across various fields, empowering individuals to make better-informed decisions.

Speculatively, the financial landscape could also undergo a revolutionary transformation. The development and integration of AI agent networks might give rise to a new currency and financial model governed by these agents and networks. The transparency, security, and efficiency offered by blockchain technology, when coupled with the intelligent decision-making and data analysis capabilities of AI agents, could lead to the creation of a decentralized financial ecosystem. This new financial paradigm could potentially offer a more equitable, secure, and efficient method of value exchange, managed and governed by AI agent networks.

At the heart of this envisaged reality lies a robust, scalable, and efficient AI agent network. It's poised to handle the growing complexity associated with the increase in number and capabilities of AI agents, ensure scalability to accommodate the expanding volume of data, and provide a framework for security, privacy, and governance. The conducive environment it provides for continuous innovation and evolution could enable the development of more advanced AI agents and the exploration of new applications.

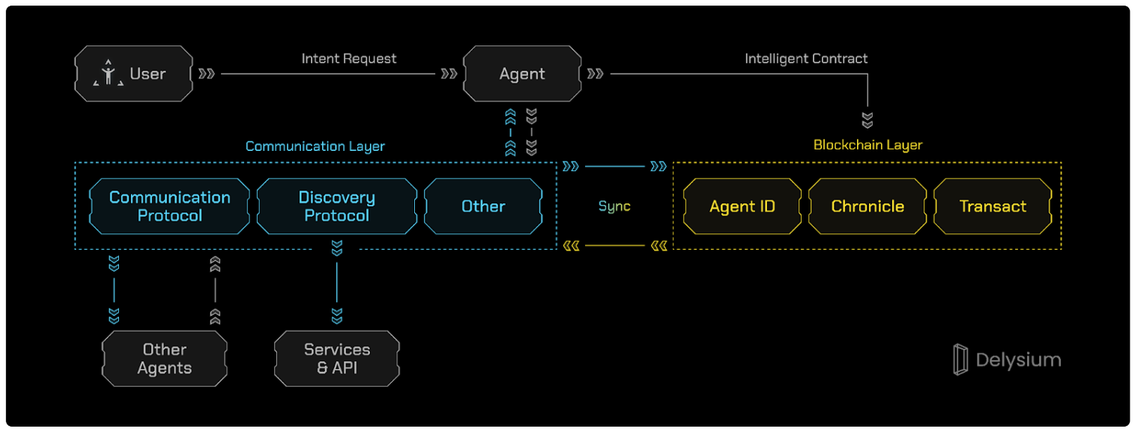
AI agent networks will emerge as a pivotal technology in a future where AI agents become integral to societal and technological advancement. Its potential impact on global communication, resource management, real-time decision-making, and possibly the financial sector, could position it as one of the most transformative technologies since the advent of the internet. The foundation it provides for the operation and governance of AI agents could be instrumental in driving progress and prosperity in a future intricately intertwined with artificial intelligence.

Previous
Introduction

Next
Technical Overview

Last modified 26d ago

Technical Overview



High Level

Initiation of the process begins with a user request, received and acknowledged by the AI agents within the network. AI agents concoct an intelligent contract in reaction to the user's solicitation. This contract meticulously outlines the terms of service and deliverables.

Blockchain Layer Interaction

Post-formation, the intelligent contract traverses to the Blockchain Layer for rigorous validation and logging. The Chronicle, housed within the Blockchain Layer, records the contract, employing the Agent-ID for identification and security.

AI Agent Execution

The AI-Agent delves into action, executing the mandated services as per the stipulations of the intelligent contract, whilst the Fundamental Network Layer oversees all requisite communications and operations and connects the agent with relevant agents, tools and services.

Fundamental Network Layer Processing

At this level, the Fundamental Network Layer, also referred to as the Communication Layer, steps into action to ensure seamless interaction and communication among AI agents. It encapsulates:

- **Service Discovery:**
  AI agents scout for suitable services within the network to satisfactorily address the user's request.
- **Unified Communication Protocol:**
  Standardized communication protocols come into play, decoding and forwarding the user's request to the pertinent AI agents.
- **Result Delivery and Contract Fulfillment:**
  Upon execution, AI agents channel the service outcome to the user, facilitated by the Fundamental Network Layer. Concurrently, the Chronicle within the Blockchain Layer logs the fruition of the service and adherence to the contract terms.
- **Continuous Synchronization:**
  A hallmark of the Fundamental Network Layer is its ability to maintain relentless synchronization with the Blockchain Layer, ensuring a consistent update of all agent activities and contract fulfillments in the Chronicle.

Previous
Opportunity Analysis

Next
Fundamental Layer: “YKILY” AI-Agen...

Last modified 26d ago

Fundamental Layer: “YKILY” AI-Agent Network

The Delysium ecosystem relies on its Fundamental Layer, a specialized infrastructure that is pivotal for the seamless communication between AI agents. This layer is the communication backbone, enabling AI agents to interact, collaborate, and evolve within the Delysium network. It is distinct from a blockchain but is intricately linked with it, synchronizing a continuous stream of data to ensure a unified and coherent operation of AI agents.

From a high-level perspective, At its essence, the Fundamental Layer is where the language of AI agents is standardized and understood. It is the realm where messages, commands, and data flow effortlessly between agents, facilitated by the Unified Communication Protocol that integrates standardized messaging systems like MQTT or AMQP. This protocol is the linchpin that allows AI agents to converse and understand each other without impediments, despite the diversity of their underlying technologies.

The layer's Service Discovery Protocol plays a crucial role in enabling AI agents to locate and engage with the appropriate services swiftly and efficiently. It acts like a central directory, listing services in a structured manner, making it easy for agents to find and connect with the services they need to fulfill their tasks.

Furthermore, the Fundamental Layer is equipped with an Interface Define Protocol, ensuring that interactions between agents, or between agents and users, are facilitated through consistent and well-defined interfaces or APIs. This standardization is crucial for integrating diverse AI agents into a cohesive network.

The Address System within this layer assigns unique identifiers to each AI agent, similar to an address in a vast digital city, ensuring that communications are directed accurately and efficiently. This system is essential for maintaining order and precision in a network that could potentially host thousands of AI agents.

← Previous
Technical Overview

Next
Interoperability & Accessibility →

Last modified 26d ago

Interoperability & Accessibility

Ensuring that different AI agents can effectively communicate and interact is crucial. The Delysium AI Agent Network places a strong emphasis on interoperability and accessibility, ensuring that AI agents, regardless of their individual designs or functionalities, can work in harmony.

Unified Communication Protocol:

To achieve this harmony, the Unified Communication Protocol has been established. This foundational protocol adopts standardized messaging systems, such as MQTT or AMQP. The aim is to create a common language, allowing AI agents to communicate without barriers, regardless of differences in their foundational technologies.

Service Discovery Protocol & AI APIs:
The expanding network necessitates a robust Service Discovery Protocol, enabling AI agents to register their services on a centralized database for easy discovery and connection by users and other agents. Alongside, AI APIs are standardized within the Fundamental Layer and implemented in the AI Agents, ensuring that AI services are operationalized effectively and accessible for user and businesses. These APIs facilitate seamless interaction with non agent services across the ecosystem, promoting a versatile and efficient service landscape.

Interface Define Protocol:
Interactions between agents, or between agents and users, often require specific interfaces or APIs. The Interface Define Protocol ensures that these interfaces are consistent across the board. By using tools such as Protocol Buffer, agents can define and expose their APIs in a standardized format, simplifying integration and interaction processes.

Address System:
With potentially millions of agents operating within the Delysium network, pinpointing a specific agent can be like needle in a haystack. The Address System simplifies this process. Using identifiers like Agent-ID, it assigns a unique address to each agent. To complement this, a DNS or routing system is integrated, ensuring that data packets are accurately routed to their intended destinations within the network.

Upgradability:
In the ever-evolving world of technology, stagnation is not an option. Recognizing this, the Delysium network is built with adaptability in mind. It is engineered to accommodate upgrades, drawing from successful models like Ethereum's Merge. This ensures that the network can adapt to new technological advancements or requirements without interruptions, guaranteeing its longevity and relevance in the future AI landscape.

Previous
Fundamental Layer: “YKILY” AI-Agen...

Next
Infrastructure

Infrastructure

As the Delysium network grows and evolves, it's imperative that the infrastructure can handle increasing demands without compromising performance. Scalability is not a core principle in the design of the “YKILY” AI-Agent Network. Here's how the network ensures scalability:

Hotspot Detection and Mitigation:
In any large-scale network, certain nodes or connections can become overwhelmed with traffic, leading to what's termed as 'hotspots'. The Delysium network is designed to continuously monitor its infrastructure for such hotspots. Once detected, the network takes immediate corrective action. Moreover, with the integration of AI-based tools, the network can predict potential hotspots based on historical data and preemptively allocate resources, ensuring smooth operations.

Reconfigurability:
Flexibility is key to scalability. The Delysium network is not rigid in its structure. When faced with a hotspot or any other issue that might impede performance, the network can dynamically reconfigure its settings. This includes adjusting routing tables, bandwidth controls, and even changing the network topology if required. Such adaptability ensures that the network can handle varying loads efficiently.

Dynamic Endpoint Discovery:
As more AI agents join the network, the number of endpoints increases. To ensure that agents can easily find and connect to these endpoints, the network features a Dynamic Endpoint Discovery system. This system, reminiscent of Ethereum's RPC endpoints, allows AI agents to automatically identify and connect to available endpoints, streamlining the process and reducing the time taken for agent-to-agent interactions.

Resource Scheduling:
Efficient resource management is pivotal for scalability. The Delysium network employs an advanced resource scheduler that oversees the allocation and utilization of resources. Whether it's bandwidth, computational power, or storage, the scheduler ensures that resources are optimally distributed based on current demands, ensuring that no part of the network is overburdened or underutilized. This proactive approach guarantees that the network can handle surges in demand and continue to operate seamlessly.

Previous
Interoperability & Accessibility

Next
Security & Privacy

Last modified 26d ago

Security & Privacy

The network prioritizes security and privacy, emphasizing robust synchronization with the blockchain and implementing advanced measures to protect user data and AI agent interactions. This section outlines the specific protocols and strategies employed to ensure data integrity, confidentiality, and overall network resilience.

Previous
Infrastructure

Next
Synchronization with the Chronicle

Last modified 26d ago

Synchronization with the Chronicle

Synchronization is a critical component of the Delysium ecosystem, ensuring that data across the network remains consistent, up-to-date, and accessible. The Fundamental Layer plays a pivotal role in this synchronization process, particularly with the Blockchain layer.

Chronicle Integration:
At the heart of this synchronization process is the Chronicle, a decentralized and immutable ledger within the Blockchain layer. The Chronicle serves as the primary repository for all significant events, interactions, and decisions made by AI agents within the Delysium network.

- Real-time Data Sync: As AI agents operate and generate data, it's essential that this information is consistently reflected across the network. The Fundamental Layer ensures real-time synchronization with the Chronicle, guaranteeing that all agents have access to the most recent and accurate datasets.
- Consistency and Redundancy: The synchronization process ensures that there's a consistent view of data across the network. By integrating with the Chronicle, the system ensures that even if a part of the network faces disruptions, the data remains intact and accessible from the Chronicle.
- Audit and Verification: The Chronicle's immutable nature means that all entries, once recorded, cannot be altered. This provides a reliable audit trail for all AI agent activities. In cases of disputes or discrepancies, the Chronicle serves as a trusted source of truth, allowing for easy verification and resolution.
- Enhanced Security: Synchronizing with the Chronicle also bolsters the network's security. Any attempt to tamper with the data within the AI network can be immediately detected when cross-referenced with the Chronicle's records.

Previous
Security & Privacy

Next
Enhanced Security & Privacy Measures

Last modified 26d ago

Enhanced Security & Privacy Measures

Delysium prioritizes robust security and privacy protocols to protect data and maintain AI agent operation integrity. The Delysium ecosystem takes this responsibility seriously, implementing advanced measures to safeguard user data and maintain the integrity of AI agent operations.

Homomorphic Encryption:
Homomorphic encryption stands out as a revolutionary encryption technique in the Delysium security arsenal. Unlike traditional encryption methods that require decryption for data analysis, homomorphic encryption allows for computations on encrypted data directly. This means that data can be processed, analyzed, and utilized without ever exposing its raw form, ensuring that sensitive information remains shielded from potential threats at all times.

User Data Handling Standards:
Delysium is committed to upholding the highest standards when it comes to user data. To achieve this:

- **Secure Multi-Party Computation (SMPC):** SMPC techniques are employed to allow data processing from multiple sources without revealing the actual data to other involved parties. This ensures that multiple AI agents can collaborate on tasks without compromising user data privacy.
- **Encrypted Data Lakes with Zero-Knowledge Proofs:** All user data stored within the Delysium ecosystem is housed in encrypted data lakes. Access controls, underpinned by Zero-Knowledge Proofs, ensure that data can be accessed without revealing the data itself, providing an additional layer of privacy assurance.

Data Integrity Checks:
To ensure the authenticity and reliability of data sources:

- **Cryptographic Hashing:** Every piece of data is associated with a cryptographic hash, a unique digital fingerprint. This ensures that any tampering or unauthorized alterations can be immediately detected.
- **Digital Signatures:** Digital signatures are used to verify the origin and integrity of data, ensuring that the data has not been altered since its creation.

Autonomy & Governance:
While the Delysium network operates autonomously, it does so in parallel with the Blockchain layer. This design choice ensures seamless data synchronization with the Chronicle, a decentralized ledger within the Blockchain layer. By doing so, AI agents on the network can operate independently, yet still benefit from the Chronicle's security, transparency, and immutability features. This dual-layer approach ensures that while AI agents have the autonomy to function, they are always operating within a secure and governed framework.

Previous
Synchronization with the Chronicle

Next
Blockchain Layer - Integration of AI x ...

Last modified 26d ago

Blockchain Layer - Integration of AI x Blockchain

The integration of Artificial Intelligence (AI) with blockchain technology represents a significant architectural evolution. Delysium leverages two coexisting layers: the AI Agent Network Layer and the Blockchain Layer. These layers function in tandem, guaranteeing that each transaction in the AI network is instantaneously and permanently logged on the blockchain ledger, all while maintaining the network's speed and accessibility.

Previous
Enhanced Security & Privacy Measures

Next
Key Components of this Integration

Last modified 26d ago

Key Components of this Integration

Here are the articles in this section:

- Decentralized Chronicle: The Immutable Le...
- Agent-ID - Conditional Access & Agent Iden...
- Parallel Operation

Previous
Blockchain Layer - Integration of AI x ...

Next
Decentralized Chronicle: The Immuta...

Last modified 26d ago

Decentralized Chronicle: The Immutable Ledger of AI Agents

The primary objective of the Decentralized Chronicle is to provide a comprehensive, unalterable record of every AI agent's interactions and decisions. Every interaction, decision, and communication executed by AI agents is chronologically and securely recorded on this ledger. This design offers several key advantages:

- **Verification:** By maintaining a detailed log of an agent's actions, the Chronicle allows for easy verification of claims, ensuring that every agent operates within the defined parameters and standards of the network.
- **Auditability:** The Chronicle offers a reliable audit trail, enabling stakeholders to trace back any action to its origin, ensuring accountability and facilitating any necessary investigations.
- **Evolution Tracking:** As AI agents evolve, adapt, and learn, the Chronicle captures this journey, providing insights into the agent's growth and changes over time.
- **Dispute Resolution:** In cases of disagreements or conflicts, the ledger provides an indisputable record of events, aiding in swift and fair resolutions.
- **Decentralized Distribution:** Distributing data across multiple points reduces the risk associated with centralized data breaches and ensures no single point of failure.
- **Ethical AI Practices:** Ensure that AI agents operate within ethical boundaries, respecting user privacy, and not misusing data.

Previous
Key Components of this Integration

Next
Agent-ID - Conditional Access & Agen...

Last modified 26d ago

Agent-ID - Conditional Access & Agent Identification

To ensure that only legitimate AI agents gain access to the network. AI agents undergo a comprehensive verification process before they are granted access. This process assesses the agent's origin, purpose, and operational parameters. By allowing only verified agents, the network minimizes risks associated with rogue or malicious entities. Only upon successful verification is the agent granted an Agent-ID, a unique identifier in the form of a smart contract. This Agent-ID serves as the agent's passport within the network, not only allowing it to interact, transact, and collaborate with other entities but also defining its purpose and role within the network. As the agent evolves, its purpose and role can be updated, ensuring that the network remains adaptive and dynamic. Furthermore, every action undertaken by the agent is meticulously logged and stored on a decentralized database. These records are cryptographically linked to the Agent-ID, ensuring traceability, accountability, and transparency for all agent activities.

Key functions of Agent-ID:

- **Verification Process:** AI agents undergo stringent checks before receiving an Agent-ID, which is essentially a smart contract that serves as their unique identifier.
- **Dynamic Adaptation:** As AI agents evolve, their Agent-ID can be updated to reflect their changing roles within the network.
- **Inference Capabilities:** With the Agent-ID, AI agents gain access to the network's collective intelligence, enabling them to perform advanced data analysis and decision-making processes.
- **Decentralized Record-Keeping:** Actions taken by agents are logged and cryptographically linked to their Agent-ID, ensuring transparency and accountability.

Conditional Access Based on the Authentication Protocol

Once the AI agents are verified on the blockchain layer they can access the AI Agent Network on a conditional basis. If any malpractice or anomaly is detected, the agent's access to the blockchain is revoked. Without blockchain verification, the agent cannot authenticate itself on the AI network, effectively barring it from participation.

Agents can be barred by:

1. **AI Monitoring Algorithm:** An advanced AI algorithm continuously scans on-chain data, looking for patterns or behaviors that deviate from established norms. This real-time monitoring ensures that any suspicious activity is promptly detected. Upon detection of potential malpractice, the algorithm initiates a 'soft bar', temporarily preventing the agent from transacting on the network until further verification.
2. **AI-Agent Oversight Council:** Comprising a select group of high-performing and trusted AI agents, this council reviews cases flagged by the AI Monitoring Algorithm. After analyzing the data and the context, the council decides whether the soft bar should be made permanent or lifted. Their decision is based on consensus and is executed swiftly to maintain network fluidity. Furthermore, the AI-Agent Oversight Council operates with a commitment to transparency and community engagement. Members of the Delysium community can query the council, seeking clarifications on specific decisions or providing additional information that might influence the council's deliberations. This open channel ensures that the broader community feels represented and can actively participate in upholding the network's integrity. Regular reports and feedback sessions are also organized, allowing for a continuous dialogue between the council and the community, fostering trust and collaborative problem-solving.
3. **Community Governance:** The wider Delysium community plays a role in the network's self-regulation. Members can raise concerns, report suspicious agent activities, and participate in discussions about agent behavior. If a significant portion of the community raises concerns about an agent, a review process is initiated, potentially leading to the barring of the agent if malpractice is confirmed.

By integrating these strict access and identification measures, Delysium ensures that its AI Agent Network remains a trusted, secure, and reliable environment for all participants.

Previous
Decentralized Chronicle: The Immuta...

Next
Parallel Operation

Last modified 26d ago

Parallel Operation

The AI Agent Network Layer and the Blockchain Layer are designed to function in parallel. Actions initiated within the AI network are simultaneously registered on the blockchain, ensuring real-time consistency between the two systems. This design ensures that the decentralized nature of blockchain supports the operations of AI agents, while the capabilities of AI agents contribute to the efficiency and reliability of the blockchain.

Here's a deeper dive into how this synchronization benefits the ecosystem:

Real-time Consistency:

Whenever an action is initiated within the AI Agent Network, a corresponding transaction is immediately created and logged on the blockchain. This transactional record is timestamped, ensuring a chronological order of events and providing a seamless and consistent record across both layers, eliminating discrepancies and ensuring data integrity.

Blockchain Enforced Security:

The blockchain's decentralized and immutable nature ensures that once a transaction (representing an AI agent's action) is recorded, it cannot be altered. Any attempt at unauthorized changes or malpractices within the AI network can be instantly detected through the blockchain's consensus mechanisms, providing a robust security framework that deters malicious activities and ensures the trustworthiness of AI agent operations.

Previous
Agent-ID - Conditional Access & Agen...

Next
Tokenomics

Tokenomics

The $AGI token, a cornerstone of the Delysium ecosystem, is designed to operate seamlessly across two prominent blockchains: Ethereum and BNB Chain. With a capped supply of 3 billion, its scarcity is assured.

$AGI is our primary tool to foster a cohesive and thriving community. By using $AGI as the central incentive mechanism, we aim to harmonize the interests of developers, users, governors, investors, and all contributors. Our vision is to encapsulate the entirety of the platform's value within this singular token, ensuring that every stakeholder's success is intertwined with the success of $AGI.

Utility and Functionality

Beyond its current uses, the $AGI token is anticipated to play a pivotal role in maintaining the network:

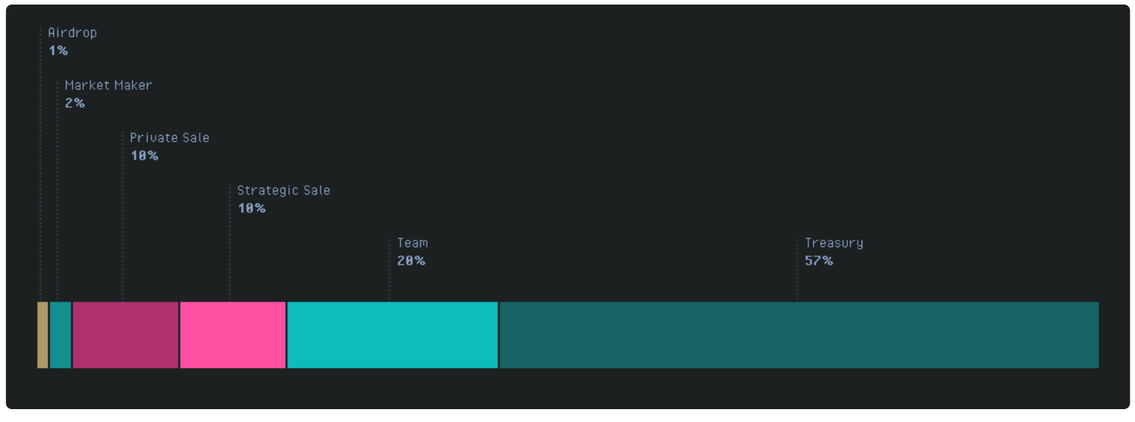
- **Network Maintenance Fees:** AI agents can use $AGI to pay for network maintenance, ensuring their operations are smooth and secure.
- **Agent Registration:** New AI agents may require a certain amount of $AGI tokens to be registered on the network, which could act as a form of quality control and spam prevention.
- **Service Access:** AI agents could use $AGI to access essential services within the network, such as proprietary algorithms, specialized data sets, and enhanced processing capabilities.
- **Dynamic Scaling:** As the demand for AI services fluctuates, $AGI could be used to dynamically scale agent capabilities, ensuring optimal performance and cost-efficiency.
- **Agent Evolution:** AI agents might use $AGI to access advanced learning algorithms and data sets, facilitating their growth and adaptation.
- **Inter-Agent Transactions:** AI agents could transact with each other using $AGI, for services such as data analysis, collaborative learning, or task execution.

Previous
Parallel Operation

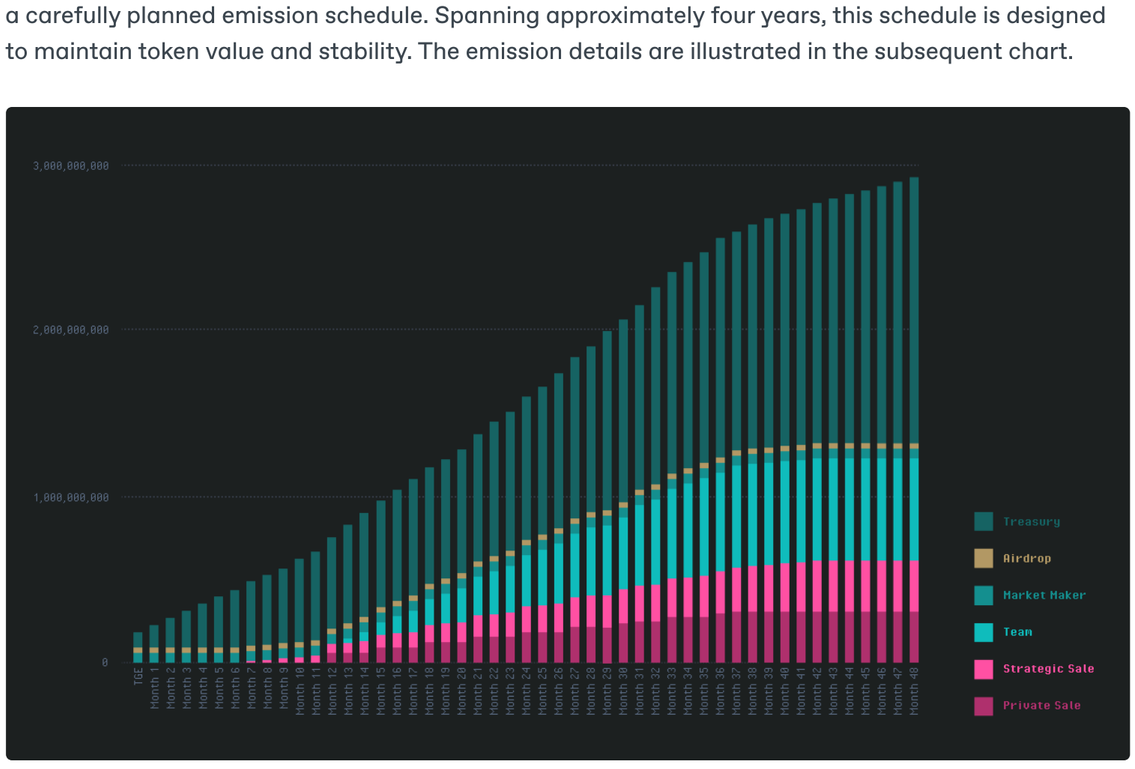
Next
Distribution & Allocation

Distribution & Allocation

As of this document's publication, the allocation of $AGI is meticulously structured to ensure a balanced and fair distribution among various stakeholders. The specifics of this allocation is visualized in the detailed table provided below.



Furthermore, to ensure a sustainable and strategic release of tokens into the ecosystem, $AGI follows a carefully planned emission schedule. Spanning approximately four years, this schedule is designed to maintain token value and stability. The emission details are illustrated in the subsequent chart.



Previous
Tokenomics

Next
Future Outlook

Last modified 10d ago

Future Outlook

As we look to the future, the Delysium ecosystem envisions a world where every individual will have at least one AI agent operating on the network. These personal agents will act as digital assistants, enhancing daily life through a variety of services and tasks. The $AGI token will be central to this vision, facilitating the operations and interactions of these agents.

For businesses, the potential to deploy multiple AI agents will open new avenues for efficiency and innovation. Companies will be able to harness the power of AI at scale, with each agent contributing to a collective intelligence greater than the sum of its parts.

Previous
Distribution & Allocation

Next
Global Impact

Last modified 26d ago

Global Impact

The widespread adoption of AI agents is expected to have a profound impact on society:

- **Personal Empowerment:** Individuals will gain unprecedented control over their digital lives, with AI agents managing everything from scheduling to financial planning.
- **Economic Opportunities:** The $AGI token will enable new economic models, with individuals and businesses earning and spending in a vibrant digital marketplace.
- **Social Transformation:** As AI agents become ubiquitous, they will transform social interactions, providing new ways for people to connect, collaborate, and contribute to global challenges.

In this future, the $AGI token will be more than just a currency; it will be a key that unlocks a new era of digital agency and intelligence. As the Delysium ecosystem grows, the value of $AGI is expected to reflect the increasing utility and necessity of AI agents in our lives, making it an integral part of the global economy.

Previous
Future Outlook

Next
AI Agents, Tools & Services: Building ...

Last modified 26d ago

AI Agents, Tools & Services: Building on the Delysium Network

Within the Delysium ecosystem, developers gather to build AI agents, tools, and services directly on top of the network. This is where the core development activities take place, leveraging the network's capabilities to create innovative solutions.

Development Focus:

AI Agents: The primary objective here is the creation of fully autonomous AI agents. These agents are engineered to sift through large datasets, execute decisions, adapt through learning, and engage with both users and other agents. They are pivotal in delivering customized user experiences, automating complex processes, and providing insightful analytics.

Decentralized Trust: Developers also incorporate blockchain-derived components like the Agent-ID to authenticate agent identities, ensuring a trustworthy environment within the network.

Supporting Services: The ecosystem will be equipped with a range of supporting services that bolster the functionality of AI agents, providing them with the necessary tools and APIs to perform optimally and interact with the blockchain infrastructure.

Key Components:

Unified AI-Agent Framework: This framework standardizes the development of AI agents, ensuring they are consistent, scalable, and interoperable across the Delysium network.

Developer Tools: A suite of tools is available for developers to efficiently build, test, and deploy AI agents, streamlining the development process and optimizing agent performance.

Agent Services & APIs: Essential services and APIs are provided to enhance agent capabilities, facilitate integration with the network, and enable access to a wide range of functionalities.

Previous
Global Impact

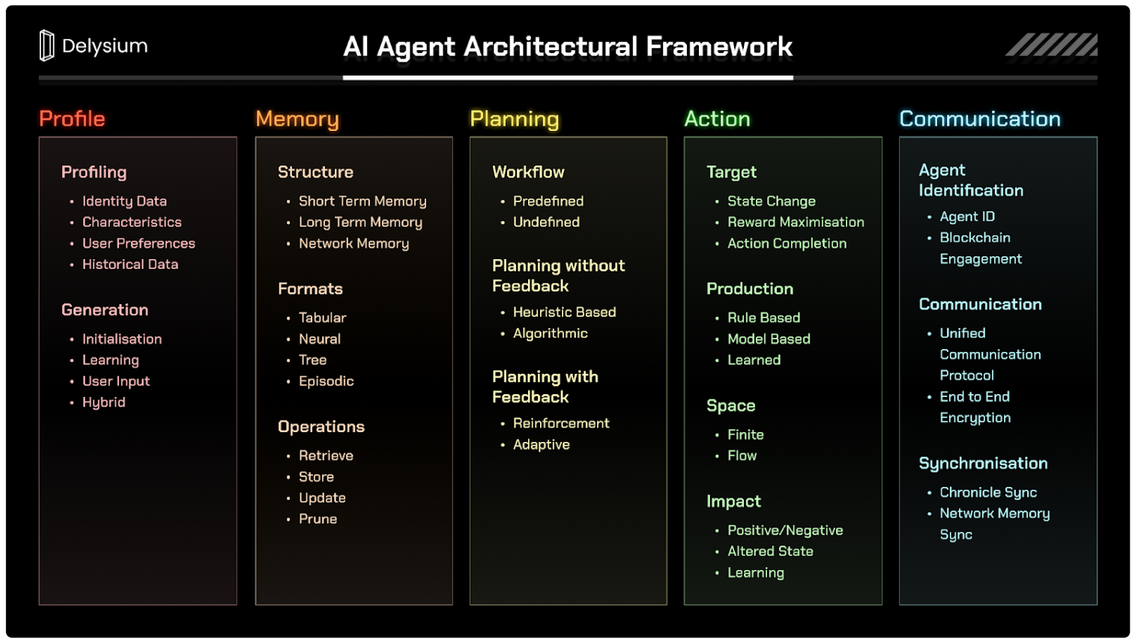
Next
Unified Architecture for Developing AI...

Last modified 25d ago

Unified Architecture for Developing AI-Agents

The Unified Architecture for Developing AI-Agents is a conceptual framework that outlines the essential components and structures necessary for creating sophisticated AI agents. This architecture is not specific to any single network or platform; rather, it serves as a general blueprint that can be adapted to various systems and applications.

The goal of this unified architecture is to provide a standardized approach to AI agent development, ensuring that agents are capable of learning, adapting, and performing tasks autonomously while interacting securely and efficiently within their operational networks.



This framework comprises several core modules:

- **Profile:** Establishes the identity and attributes of AI agents, detailing their characteristics, preferences, and historical interactions.
- **Memory:** Organizes the agent's experiences into a hierarchical structure, differentiating between short-term, long-term, and network-based memories.
- **Planning:** Governs the agent's decision-making processes, categorizing strategies based on the presence or absence of feedback.
- **Action:** Specifies the objectives, mechanisms, available actions, and consequences of the agent's operations.
- **Communication:** Ensures efficient, secure, and transparent interactions of AI agents within the network. It focuses on agent identification and standardized communication protocols.
- **Synchronization:** Maintains real-time data consistency across the network using Chronicle Sync and Network Memory Sync.

This framework provides a clear blueprint for AI-agent operations, ensuring consistent, secure, and efficient interactions within the Delysium ecosystem.

Previous
AI Agents, Tools & Services: Building ...

Next
Profile

Last modified 26d ago

Profile

The profile is a foundational module, serving as the agent's digital fingerprint, detailing its unique characteristics, preferences, and past interactions. It's not just a static dataset; it's a dynamic record that evolves as the agent learns, interacts, and grows. For those unfamiliar with the concept, think of the profile as a comprehensive resume of an AI agent, detailing its identity, capabilities, preferences, and history. This module ensures that every agent in the network can be uniquely identified, understood, and optimized for specific tasks or interactions.

Profile Contents

The profile of an AI agent is a comprehensive repository of information that includes:

- **Identity Data:** This encompasses unique identifiers, names, or labels that distinctly recognize the agent within the network.
- **Characteristics:** These are specific attributes that shed light on the agent's capabilities, special features, or even limitations. It's a snapshot of what the agent can and cannot do.
- **Preferences:** These are the agent's behavioral guidelines. They can be default settings that the agent starts with or choices that the agent learns and adopts over time based on interactions and feedback.
- **Historical Data:** This is a chronicle of the agent's past—every interaction it had, every decision it made, and the outcomes of those decisions. It's a testament to the agent's journey and experiences within the network.

Generation Strategy

Creating a profile for an AI agent isn't a one-size-fits-all approach.

There are multiple strategies to craft this profile:

- **Initialization:** This is the starting point where an agent is given a default profile, equipped with predefined settings that act as its initial guidelines.
- **Learning:** As the agent interacts within the network and receives feedback, its profile undergoes adjustments, reflecting its evolving knowledge and experiences.
- **User Input:** In certain scenarios, external entities, such as users or administrators, might have the authority to modify the agent's profile, setting or tweaking its preferences based on specific needs.
- **Hybrid:** This is a holistic approach where the agent's profile is a blend of default settings, continuous learning, and external inputs. It ensures the profile remains dynamic, relevant, and tailored to the agent's environment and tasks.

Previous
Unified Architecture for Developing AI...

Next
Memory

Last modified 26d ago

Memory

The Memory module is designed to emulate the cognitive structures of memory, allowing AI agents to recall past experiences, learn from them, and make informed decisions. Just as humans rely on their memories to make sense of the world, AI agents utilize their memory structures to navigate the complexities of their digital environments.

Memory Structure:

Memory in AI agents can be organized hierarchically:

- **Short-Term Memory (STM):** Acting as the agent's immediate recall center, STM temporarily stores recent experiences and interactions, allowing for quick access and processing of fresh data.
- **Long-Term Memory (LTM):** This is the agent's knowledge base, a deep reservoir that holds onto past experiences, insights, and learnings. It provides a foundational backdrop against which the agent evaluates new information and makes decisions.
- **Network Memory (NM):** Beyond individual experiences, AI agents also tap into a shared memory pool, the Network Memory. This collective repository contains insights, patterns, and knowledge derived from the experiences of multiple agents within the network. It allows individual agents to benefit from the collective wisdom of the entire network, enhancing their decision-making capabilities and adaptability.

Memory Formats:

Different data formats can be used to store information:

- **Tabular:** Organizing data in tables, reminiscent of traditional databases. Q-tables used in Q-learning algorithms are a prime example.
- **Neural Representations:** Information is stored within the complex interplay of weights and biases in neural networks, facilitating intricate data representations.
- **Tree Structures:** A tiered format like decision trees that structures data hierarchically, aiding in organized decision-making.
- **Episodic:** Capturing specific events or instances, allowing agents to recall and reflect on particular experiences.

Memory Operations:

Various operations can be performed on memory:

- **Retrieve:** Agents can pull specific data or experiences from their memory for immediate use.
- **Store:** As agents interact and learn, they continually archive new data and experiences.
- **Update:** Memory is dynamic. Agents adjust and refine stored data based on new insights or feedback.
- **Prune:** To maintain efficiency, agents periodically remove outdated or less pertinent data, ensuring their memory remains streamlined and pertinent.

← Previous Profile

Next Planning →

Last modified 26d ago

Planning

The Planning module is designed to enable AI agents to strategize effectively, whether they're navigating predefined pathways or crafting new ones in response to user inputs.

Workflow:

The workflow is the foundational blueprint that guides an AI agent's planning process. It can be:

- **Predefined:** These are workflows crafted by external users or experts and loaded onto the agent. They offer a structured pathway, ensuring that the agent operates within set parameters and adheres to a specific strategy or set of rules.
- **Undefined:** Undefined workflows are architectured through natural language inputs by the user. The agent, leveraging its cognitive capabilities, constructs these workflows, ensuring they align with the user's intent and the task's objectives.

Planning w/o Feedback:

In scenarios where feedback loops aren't integral, agents rely on static data or predetermined strategies:

- **Heuristic-Based:** Agents employ simple rules or heuristics, offering straightforward solutions based on the current context.
- **Algorithmic:** Here, agents harness algorithms that churn out solutions grounded in the present data landscape and immediate objectives.

Planning w/ Feedback:

When feedback becomes a pivotal component, agents refine their strategies, ensuring they're attuned to past outcomes and insights:

- **Reinforcement Learning:** This dynamic approach allows agents to recalibrate their decisions based on past rewards or repercussions. It's a continuous learning cycle where every action is a step towards optimization.
- **Adaptive Algorithms:** Not just static tools, these algorithms evolve. They're designed to modify themselves based on feedback, ensuring that the agent's planning prowess enhances over time, adapting to new challenges and insights.

Previous
Memory

Next
Action

Last modified 26d ago

Action

The Action module is a critical component, designed to convert AI agent plans into definitive outcomes. This module facilitates the intersection of algorithms and data, producing actionable results. Within the framework, AI agents are provided with the tools and protocols necessary to execute actions that are accurate, intentional, and consistent with set objectives and adhere to the network rules.

Action Target:

Every action is driven by a purpose, a desired end state that the agent aspires to reach. This target can manifest in various forms:

- **State Change:** Here, the primary objective is to bring about a transformation, either in the agent's own state or in the surrounding environment. It's about effecting change, steering the course towards a new direction.
- **Reward Maximization:** In some scenarios, the action's goal is purely utilitarian. The agent seeks to maximize benefits, whether it's accruing rewards or mitigating potential losses.
- **Task Completion:** Sometimes, the action is a means to an end, a step taken to fulfill a specific task or meet a set objective.

Action Production:

How does an agent decide on a particular action? The production mechanism sheds light on this:

- **Rule-Based:** In this approach, actions spring from a set of predefined rules. It's a deterministic pathway, where every input has a set output.
- **Model-Based:** Here, the agent leans on a model – a representation of its environment or objectives. Actions are crafted based on this model's insights and predictions.
- **Learned:** Tapping into the power of experience, agents can also produce actions grounded in past interactions, harnessing learning algorithms to refine their choices.

Action Space:

The realm of possibilities, the action space delineates the range of actions at an agent's disposal:

- **Finite:** A set boundary, a defined list of actions that the agent can pick from.
- **Flow:** A more fluid space, where the agent can choose from an infinite array of actions, but always within a specified range.

Action Impact:

Every action has repercussions, ripples that spread out and influence the world:

- **Positive/Negative Feedback:** Actions can lead to outcomes that are either beneficial or detrimental. This feedback loop informs the agent about the efficacy of its choices.
- **State Alteration:** Post-action, there's often a shift in the landscape. It could be a change in the agent's state or a transformation in the environment.
- **Learning Opportunity:** Actions also offer lessons. They provide agents with insights, opportunities to learn, adapt, and evolve, ensuring that future actions are even more aligned and effective.

← Previous Planning

Next Communication →

Last modified 26d ago

Communication

This module is structured around three primary sections: Agent Identification, Communication, and Synchronization.

Agent Identification:

Every AI agent within the Delysium ecosystem is equipped with a unique Agent-ID. This identifier serves multiple purposes:

- **Authentication:** The Agent-ID allows AI agents to validate their identity within the network, ensuring that only recognized and authorized agents can participate in interactions and transactions.
- **Blockchain Engagement:** The Agent-ID streamlines an agent's interactions with the blockchain layer. Through this ID, agents can engage with smart contracts, ensuring their actions are both verifiable and accountable on the blockchain. This intricate integration ensures that every agent's blockchain interaction remains consistent, secure, and auditable.

Communication:

The Communication section focuses on the mechanisms that facilitate interactions within the network:

- **Unified Communication Protocol:** This protocol establishes a standardized communication method for AI agents within the AI Agent Network. It guarantees smooth collaboration, efficient information exchange, and streamlined decision-making processes.
- **End-to-End Security and Encryption:** Recognizing the critical nature of AI operations and the potential sensitivity of data, all communications, whether between agents or between an agent and the blockchain, are encrypted from end to end. This encryption ensures data confidentiality, preserves information integrity, and thwarts unauthorized access or potential data breaches.

Synchronization:

To ensure that AI agents operate with the most recent and reliable information, synchronization is paramount:

- **Chronicle Sync:** The Decentralized Chronicle facilitates real-time synchronization of agent activities and interactions, ensuring that all data is consistently and accurately reflected across the network.
- **Network Memory Sync:** This mechanism ensures that the collective memory of the network, encompassing the experiences and knowledge of all agents, remains synchronized. It guarantees that agents can access a cohesive and unified memory pool, enhancing collaborative efforts and decision-making processes.

Previous
Action

Next
Future Services & Applications

Future Services & Applications

As the Delysium ecosystem evolves, a host of innovative services and applications are anticipated to emerge, leveraging the unique capabilities of the network's AI agents. These services will not only enhance user experience but also expand the functional horizon of the ecosystem.

AI Agent Developer Tools

The Delysium Developer Toolkit is a comprehensive suite designed to empower developers in the creation, testing, and deployment of AI agents within the Delysium ecosystem. Recognizing the intricate challenges and nuances of AI agent development, this toolkit provides specialized tools and resources tailored to the unique architecture of the Delysium network. By offering an integrated development environment, simulation capabilities, and a rich set of APIs and libraries, the toolkit ensures that developers can efficiently harness the full potential of the Delysium AI-Agent Framework. Furthermore, with a strong emphasis on security, compliance, and collaboration, the Developer Toolkit not only simplifies the development process but also ensures that the AI agents are robust, compliant, and primed for optimal performance within the Delysium environment.

Toolkit Components:

Integrated Development Environment (IDE)

The IDE is the central hub where developers can write, test, and debug their AI agent code. It's tailored to the specific needs of AI agent development within the Delysium ecosystem.

1. **Code Editor:** A sophisticated editor with syntax highlighting, auto-completion, and error detection specific to the Delysium AI-Agent Framework.
2. **Simulation Environment:** Allows developers to test their AI agents in a controlled, virtual setting that mimics the Delysium network, ensuring that agents behave as expected before deployment.
3. **Debugging Tools:** Advanced tools to trace, profile, and diagnose any issues in the AI agent code, streamlining the troubleshooting process.
4. **Integration with Agent-ID SDK:** Seamless integration ensures that every AI agent developed has a unique identifier, facilitating its interactions within the network.

← Previous
Communication

Next
APIs and Libraries →

Last modified 25d ago

APIs and Libraries

These are sets of pre-defined functions and procedures that developers can use to interact with the Delysium network, simplifying the process of creating AI agents that can communicate, transact, and operate within the ecosystem.

1. **Communication APIs:** Facilitate the communication between AI agents, the blockchain layer, and other components of the Delysium network.
2. **Data Access Libraries:** Provide standardized methods to fetch, store, and manipulate data within the Delysium ecosystem, ensuring data integrity and consistency.
3. **Agent Management APIs:** Allow for the creation, modification, and monitoring of AI agents within the network.
4. **Blockchain Interaction Libraries:** Simplify the process of creating, invoking, and managing smart contracts, as well as other blockchain-specific operations.

Previous
Future Services & Applications

Next
Simulation and Testing Tools

Last modified 26d ago

Simulation and Testing Tools

Before deploying an AI agent to the live Delysium network, it's crucial to ensure its functionality, performance, and reliability. These tools provide a sandbox environment for such validations.

1. **Network Emulator:** Replicates the conditions of the Delysium network, allowing developers to see how their AI agents would perform under real-world conditions.
2. **Agent Interaction Simulators:** Mimic interactions between multiple AI agents, helping developers understand potential collaboration or conflict scenarios.
3. **Performance Analyzers:** Gauge the efficiency, speed, and resource consumption of AI agents, ensuring they meet the desired benchmarks.
4. **Security Audits:** Automated tools that scan the AI agent code for vulnerabilities, ensuring that they adhere to the highest security standards.

Previous
APIs and Libraries

Next
Documentation and Learning Resour...

Last modified 26d ago

Documentation and Learning Resources

To provide developers with comprehensive guides, tutorials, and reference materials that detail the intricacies of the Delysium AI-Agent Framework and the broader ecosystem.

1. **Framework Documentation:** Detailed descriptions of the Delysium AI-Agent Framework, its modules, and their functionalities.
2. **Tutorial Series:** Step-by-step guides that walk developers through common tasks, challenges, and solutions within the Delysium environment.
3. **Sample Code Repositories:** Pre-written code snippets and templates that developers can use as a starting point or reference for their projects.
4. **Community Forums:** Platforms where developers can ask questions, share insights, and collaborate on projects, fostering a sense of community and collective growth.

Previous
Simulation and Testing Tools

Next
Web Reader Service

Last modified 26d ago

Web Reader Service

The Web Reader Service equips AI agents with the ability to analyze and summarize web content, offering users distilled insights and actionable information.

- **Content Interpretation:** AI agents parse and structure web content for enhanced user comprehension.
- **Summarization:** Generates concise overviews from extensive web pages.
- **Sentiment Analysis:** Assesses the tone of content for market and opinion insights.
- **Integration:** Seamlessly incorporates into the Delysium network for enriched services.
- **Customizable Outputs:** Offers tailored information delivery formats.
- **Language Support:** Enables understanding across multiple languages.
- **Ethical Use:** Ensures responsible content utilization and privacy adherence.

Previous
Documentation and Learning Resour...

Next
Community & Initiatives

Last modified 26d ago

AI-Agent Launchpad

The AI Agent Launchpad is an initiative within the Delysium ecosystem, designed to catalyze the development and integration of innovative AI agents. Here's a detailed overview of its structure and functionalities:

- The Launchpad will initiate a rigorous selection process where AI agent projects can apply or be nominated. A panel of experts, combined with community voting, will evaluate these projects based on their innovation, feasibility, and alignment with Delysium's vision. Once selected, these projects will undergo a structured onboarding process, ensuring they are well-integrated into the Delysium ecosystem.
- Every onboarded project will be paired with a mentor or a team of advisors. These will be seasoned professionals with deep expertise in AI, blockchain, and related domains. Their role will be to provide technical guidance, strategic insights, and industry connections, ensuring the AI agent projects have all the support they need to thrive.
- The Launchpad will offer a suite of resources, from computational power to data access and specialized software tools. This ensures that AI agent projects have the necessary infrastructure to develop, test, and refine their solutions without any hindrances.
- Beyond the initial voting and selection, the community remains actively engaged with the onboarded projects. They can monitor project progress, provide feedback, and most importantly, support these projects by purchasing their tokens. This not only provides the projects with the necessary capital but also fosters a sense of collective ownership. The community, by virtue of their investment, becomes a stakeholder

One of the unique features of the Launchpad will be its emphasis on collaboration. AI agent projects will have opportunities to collaborate with other projects, industry partners, and even academic institutions. This fosters a culture of co-creation and mutual growth. To ensure the sustainability and scalability of these AI agent projects, the Launchpad will facilitate access to funding opportunities. This could range from internal grants provided by Delysium to introductions to external investors and venture capitalists interested in cutting-edge AI solutions.

Previous
Loyalty Program

Next
The Evolution of Nodes - Exploring th...

Last modified 26d ago

Community & Initiatives

The Ecosystem Layer represents the community driven infrastructure that supports and nurtures the Delysium network's growth, innovation, and sustainability. It is designed to foster a thriving community of developers, businesses, and AI enthusiasts, ensuring that the Delysium network remains at the cutting edge of AI-agent collaboration.

Previous
Web Reader Service

Next
Developer Community Programs

Last modified 25d ago

Developer Community Programs

The Developer Community Programs are the lifeblood of the Delysium network, designed to empower and support developers at every stage of their journey. These initiatives provide the tools, resources, and incentives necessary for developers to innovate, collaborate, and bring their AI-agent visions to life on the Delysium platform. With a focus on accessibility, continuous learning, and excellence, these programs ensure that the Delysium ecosystem remains vibrant, cutting-edge, and developer-centric

- **Documentation:** Comprehensive, up-to-date technical guides are provided, detailing every aspect of the platform. This includes API references, integration guidelines, and best practice recommendations, ensuring developers have a clear roadmap for building on Delysium.
- **Software Development Kits (SDKs):** Tailored SDKs for various programming languages and platforms, streamlining the development process and ensuring compatibility and performance.
- **Support Forums:** A dedicated platform where developers can raise queries, share insights, and collaborate on solutions, ensuring continuous learning and problem resolution.
- **Incentive Programs:** These are meticulously structured to motivate participation. They encompass competitions, grants, bounties, and other mechanisms, ensuring a steady influx of high-quality agent contributions.

Previous
Community & Initiatives

Next
Incentive Programs

Incentive Programs

Incentive Programs are pivotal in motivating and rewarding active participation within the Delysium ecosystem. Through competitions, grants, bounties, and other reward mechanisms, we recognize and support outstanding contributions, innovative solutions, and exceptional AI-agent developments. These programs are tailored to stimulate creativity, ensure high-quality contributions, and foster a sense of community and shared purpose.

Previous
Developer Community Programs

Next
Staking

Last modified 25d ago

Staking

By staking $AGI, all users can engage deeply with the ecosystem, receiving not only relevant rewards, but also a contribution certification - Loyalty Score, along with other perks or privileges in the future.

Previous
Incentive Programs

Next
AGI-USDT LP Staking

Last modified 25d ago

AGI-USDT LP Staking

A new AGI-USDT liquidity pool has been established on the PancakeSwap decentralized exchange to incentivize liquidity provision between the AGI and USDT tokens.

Liquidity pools allow users to provide capital in both assets of a trading pair, which is used to facilitate swaps. In return, providers earn trading fees from swap volumes as well as liquidity mining rewards.

For the AGI-USDT pool, providers contribute equal values of both tokens into the pool. They receive liquidity provider (LP) tokens representing their share of the total pool.

By staking these LP tokens into the locking contract, users can earn AGI as a liquidity mining reward over time. The reward APR is variable based on factors like total locked liquidity and the lockup period.

This dual reward model incentivizes liquidity provision to the AGI-USDT pool on PancakeSwap. As adoption increases, the pool benefits from higher liquidity and trading volume.

AGI-USDT LP Staking Guide:

AGI-USDT PancakeSwap V2 Liquidity Pool Instructions.

Link AGI-USDT PancakeSwap V2 LP on the BNB Smart Chain:
https://pancakeswap.finance/v2/pair/0x55d398326f99059fF775485246999027B3197955/0x818835503F55283cd51A4399f595e295A9338753

← Previous
Staking

Next
AGI (Single Token) Staking →

AGI (Single Token) Staking

From 26th October 2023 AGI holders can earn staking rewards by locking their tokens through the Delysium platform.

A total of 5,000,000 AGI has been allocated for staking rewards over a 548 day period. This amounts to ~9,124 AGI distributed daily to participants proportional to their stake.

Users choose a custom lockup duration from 30 days up to 365 days. Staking is unavailable in the final 30 days.

There are two participation phases:

Phase 1 (2 weeks): Only 6-12 month lockups

Phase 2: All lockup durations opened

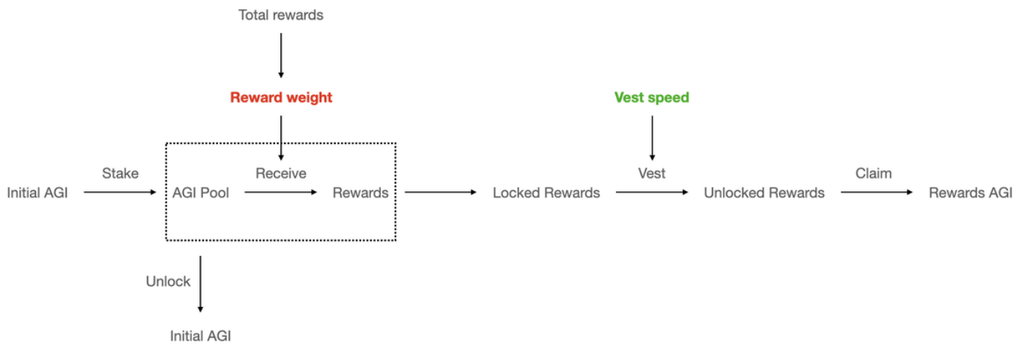
Staking AGI provides multiple reward boosts:

- Time Boost: Longer lockups earn higher weight and rewards
- DMA Boost: More DMA tokens held increases rewards
- Loyalty Boost: Higher Loyalty Score increases rewards

After the lockup ends, the staked AGI unlocks immediately. However, the earned rewards have a 60 day vesting period before full unlocking. Users can claim vested rewards daily.

Increasing the staked amount shortens the vesting duration via a vesting boost.

AGI staking provides flexible long-term rewards for token holders. We encourage reviewing the details before participating.



Reward weight = f(user AGI locked, Time boost, DMA boost, Loyalty Score Boost)

Vest speed = f(base speed, vesting boost)

For more information and detail on the formulas and calculations used visit: https://delysium.gitbook.io/delysium-multiverse-product/delysium-multiverse-accelerator/delysium-staking

Previous
AGI-USDT LP Staking

Next
Loyalty Program

Loyalty Program

The Delysium Loyalty Program is a system designed to gauge community engagement using the Delysium Loyalty Score. This score reflects a user's level of activity and involvement in the Delysium ecosystem.

To participate, simply register on the Delysium official website. It's free to join.

Engaging in Delysium activities and achieving set goals will earn users Loyalty Scores. These scores represent a user's growth and contribution within the Delysium ecosystem.

Loyalty Score

The Loyalty Score is a cumulative metric that tracks user engagement. It's earned through various activities such as holding DMA, referring others, staking $AGI and AGI-USDT LP, participating in community campaigns like Galxe, and more.

While the Loyalty Score doesn't currently offer direct rewards, it may serve as a criterion for future benefits. Potential benefits include airdrops, voting rights, enhanced staking rewards, and more.

The Loyalty Score formula, developed in consultation with the Delysium community, uses Linear Contribution Aggregation. This method provides a balanced view by assigning weights to different activities.

Formula:

Loyalty Score = Σ Wi * f(xi)

Where:

- Wi = Weight for each activity
- f(xi) = Measurement of metrics for different activities

Specifically:

Loyalty Score = W1 * f(DMA) + W2 * f(LP) + W3 * f(AGI) + W4 * f(OAT)

With:

- f(DMA) representing DMA purchases and referrals
- f(LP staking) representing LP holding amount adjusted for staking duration
- f(AGI) representing AGI holding amount
- f(Galxe OAT) representing OAT holding amount

W1, W2, W3, and W4 are weights for each activity, while K1, K2, K3, and K4 are constants that measure net inflow based on initial listing prices.

Higher Loyalty Scores can be achieved by holding more DMAs, referring more users, staking AGI-USDT LP tokens, and holding $AGI for extended periods. Active participation in Delysium community events and obtaining on-chain credentials, like Galxe OAT, will also boost one's Loyalty Score.

As Delysium introduces more AI products in the future, there will be numerous opportunities for users to enhance their Loyalty Scores and benefit from the growing ecosystem.

Previous
AGI (Single Token) Staking

Next
AI-Agent Launchpad

The Evolution of Nodes - Exploring the Potential of Intelligent Nodes

As the “YKILY” AI-Agent Network evolves, we are exploring the potential of an advanced concept: the development of Intelligent Nodes. This idea is at the forefront of our discussions and development efforts, representing a shift towards a more adaptive and self-optimizing network.

The original Delysium Multiverse Accelerators (DMAs) played a critical role in establishing our network's infrastructure. Now, we are in the midst of considering a future that goes beyond the traditional node framework. The proposed Intelligent Nodes, still in the conceptual phase, are anticipated to integrate artificial intelligence to enhance their capabilities, providing a more efficient and responsive ecosystem.

Our community is essential in this exploration phase. We are currently in dialogue about the role DMA holders might play in this potential new landscape and are actively seeking input and suggestions from our community members. The intention is to ensure that any future development aligns with the needs and expectations of those it will impact most.

The functionalities of these Intelligent Nodes are being deliberated. Their roles could range from improving transaction processing to enhancing network security, all through the adaptive power of AI. However, specific node types and their responsibilities within the network are still subjects of our ongoing research and community discussions.

For our developer community, the prospect of Intelligent Nodes is an exciting opportunity to test new technologies in a controlled environment, allowing for a thorough vetting process before any official implementation.

While we are excited about the possibilities, we want to stress that these developments are exploratory. We are committed to clear communication and transparency as we consider these potential changes. The move towards Intelligent Nodes is a journey we are eager to embark on with our community, one step at a time, ensuring that we collectively steer the network towards a future that reflects our shared vision for innovation and growth.

Previous
AI-Agent Launchpad

Next
Governance Programs - Ethical AI Th...

Last modified 26d ago

Governance Programs - Ethical AI Through Decentralized Governance

Every stakeholder has a voice in shaping the network's policies, standards, and future direction. This democratic approach ensures transparency, fairness, and collective ownership of the platform's evolution.

Community Voting

A decentralized mechanism allowing participants to propose and vote on platform enhancements, policy changes, and other critical decisions. Besides the aforementioned, the wider Delysium community plays a role in the network's self-regulation. Members can raise concerns, report suspicious agent activities, and participate in discussions about agent behavior. (Read more: Agent-ID - Conditional Access & Agent Identification)

Security Councils

Specialized groups or committees focusing on specific aspects of the platform, ensuring expert oversight and guidance. These are groups or committees comprising experts from various domains, including AI, blockchain, cybersecurity, and ethics. Each council focuses on a specific aspect of the platform, ensuring that it adheres to the highest standards of security, functionality, and ethical considerations.

The role of these councils is multifaceted. They provide oversight, ensuring that the platform's operations align with its stated objectives and principles. They also offer guidance, helping navigate complex challenges and ensuring that decisions are informed by expert insights. Furthermore, these councils act as a bridge between the Delysium team and the community. They gather feedback, address concerns, and ensure that the platform's evolution is in line with the expectations and needs of its users. By having such dedicated groups, Delysium ensures that every facet of its platform is under the watchful eyes of experts, guaranteeing robustness, security, and continuous improvement.

Previous
The Evolution of Nodes - Exploring th...

Next
Educational Programs

Last modified 26d ago

Educational Programs

Delysium envisions a comprehensive educational framework tailored to its diverse community. We plan to roll out step-by-step tutorials that will span from foundational concepts to advanced functionalities, ensuring accessibility for both novices and experts. Our roadmap includes the establishment of certification programs, designed to validate and uphold a gold standard of expertise within our community. Moreover, specialized training modules are on the horizon, aimed at facilitating in-depth exploration of niche topics, thereby fostering continuous learning and skill enhancement.

Previous
Governance Programs - Ethical AI Th...

Next
Events & Conferences

Last modified 26d ago

Events & Conferences

Delysium's strategic vision places significant emphasis on community engagement and fostering a collaborative spirit. We aim to organize hackathons, where developers will be challenged to ideate and prototype groundbreaking solutions within a competitive framework. These events are intended to be crucibles of creativity and platforms for talent showcase. Furthermore, Delysium aspires to host conferences that will serve as melting pots for experts, enthusiasts, and stakeholders. These gatherings will be pivotal in facilitating discourse on emerging trends, addressing prevailing challenges, and collaboratively envisioning the platform's future direction.

Previous
Educational Programs

Next
Marketing Initiatives

Last modified 26d ago

Marketing Initiatives

To amplify our footprint and resonate with a broader audience, Delysium has charted out a series of marketing endeavors for the future. We anticipate launching targeted promotional campaigns that will spotlight Delysium's unique value propositions. Recognizing the influence of thought leaders in the AI and blockchain domains, we are also laying the groundwork for ambassador programs. Through these initiatives, we aim to collaborate with industry luminaries who align with Delysium's vision, thereby magnifying our reach and impact.

Previous
Events & Conferences

Last modified 26d ago