



# **DECENTRALIZED ACCESS PROTOCOL** white paper

In the future built by DAP, every click,  
every visit, and every interaction will  
create real value for you

*DAP: Redefining Access, Empowering  
Value - The Passport to Web3*

<https://daptoken.site>





# Preface

In the digital age, data and access rights have become the core value carriers of the Internet. However, the traditional centralized model has long monopolized the control of user data, making it difficult for content creators to obtain fair benefits, developers are subject to platform rules, and users continue to sacrifice privacy in exchange for basic services. This unbalanced pattern urgently needs a fundamental change.

DAP (Decentralized Access Protocol) came into being. We believe that the future Internet should be controlled by users independently - whether it is identity authentication, data sharing, or value transfer, transparent and efficient collaboration should be achieved through decentralized protocols. The DAP protocol uses blockchain technology and token economic models to build an open access control framework, allowing developers to freely build applications, allowing content creators to directly obtain benefits, and users to truly own their own digital sovereignty.

<https://daptoken.site>

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# 1. PROJECT INTRODUCTION

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## 1.1 Background and Vision

In the current Internet ecosystem, users' access rights to digital content and services are highly dependent on the control of centralized platforms. Whether it is social media, streaming platforms, or API services, access authorization, data ownership, and revenue distribution are often monopolized by a few centralized institutions, resulting in:



### **Loss of user data sovereignty**

The platform controls user identity and behavior data, which poses a risk of abuse or leakage.



### **Developers are restricted by platform rules**

API access rights and revenue distribution are opaque, and innovation is limited.



### **Unfair value distribution**

Content creators find it difficult to directly obtain reasonable revenue, and the commissions taken by the middlemen are too high.

DAP (Decentralized Access Protocol) aims to build a decentralized access authorization and value settlement protocol through blockchain technology, allowing users, developers and content providers to achieve autonomous collaboration in an open, transparent and efficient ecosystem.



# 1. PROJECT INTRODUCTION

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## 1.2 Protocol Overview

DAP is an open protocol based on smart contracts and DAP tokens. Its core functions include:

### **Decentralized Identity (DID):**

- Users can achieve seamless access across platforms through on-chain identities (such as wallet addresses) or OAuth/Web3-compatible login methods.

### **Dynamic permissions management:**

- Smart contract-based access control list (ACL) supports on-demand authorization (such as temporary API calls, content subscriptions).

### **On-chain micropayments and settlements:**

- Through DAP tokens, instant and low-cost access payment and value distribution are achieved, reducing the commission of middlemen.

### **Data sovereignty and privacy protection:**

- Combining zero-knowledge proof (ZKP) and EIP-712 signature ensures that user data is shared securely within the authorized scope.



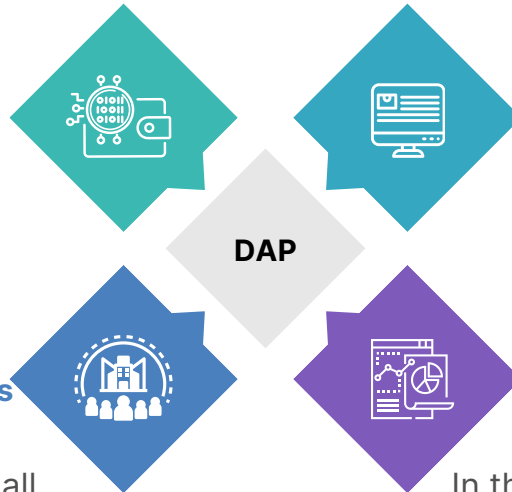
# 1. PROJECT INTRODUCTION

## 1.3 Application Scenarios

The DAP protocol can serve the following areas:

### Web3 Applications

Provide standardized access control for DApp, replacing traditional API key management.



### Content Platform

Creators can set subscription rules on the chain, and the proceeds will be directly settled in the wallet.

### Enterprise API Services

Developers obtain enterprise-level API call permissions by staking DAP tokens and pay based on usage.

### Cross-chain data interoperability

In the future, it will support data verification and permission synchronization of multi-chain ecosystems.

DAP Protocol Advantages:

| Conventional Model                                         | DAP                                                                            |
|------------------------------------------------------------|--------------------------------------------------------------------------------|
| Centralized platforms dominate the distribution of rights. | Automated authorization through smart contracts, with transparent regulations. |
| User data is managed by the platform.                      | Data ownership resides with the user, and authorization is verifiable.         |
| Incurs substantial intermediary fees                       | On-chain micropayments aimed at minimizing transaction fees.                   |
| Developers face limitations imposed by platform policies.  | Open protocol, devoid of a singular point of intervention.                     |

## 2. TOKEN INFORMATION

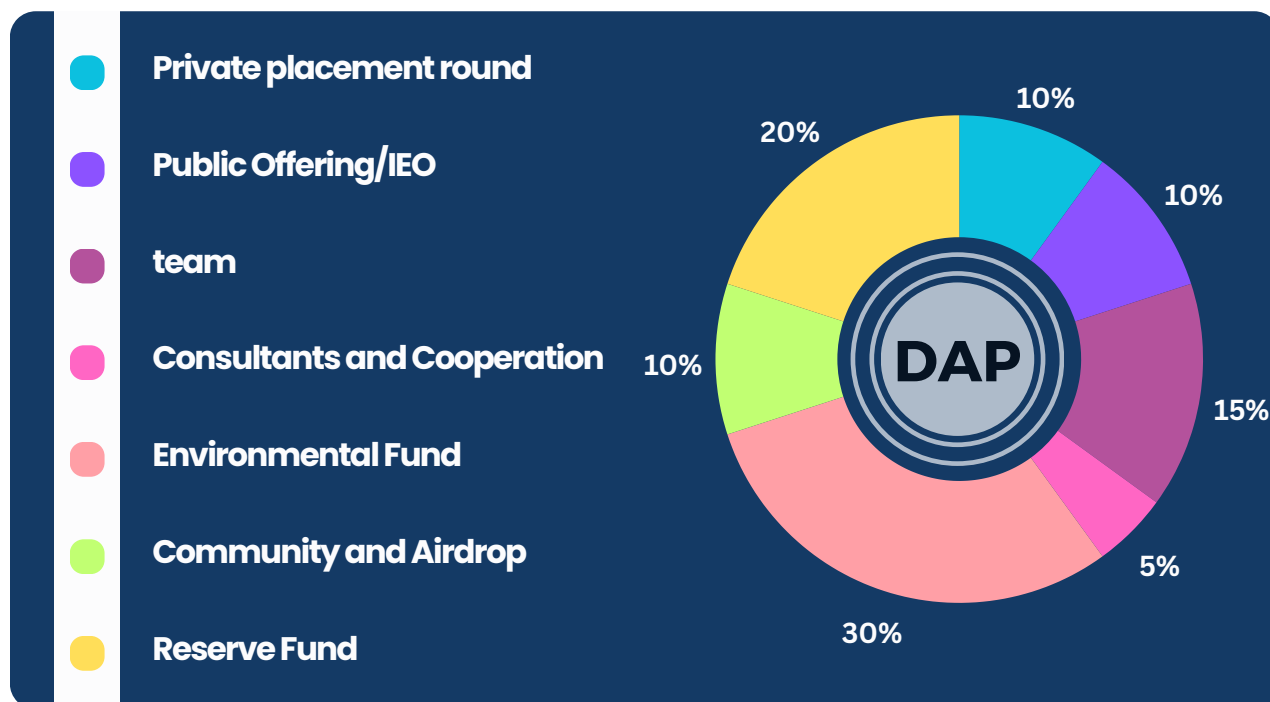
DAP Token is the native functional token of the DAP protocol, issued based on the Ethereum ERC-20 standard, and will be expanded to multi-chain ecosystems (such as Polygon and Arbitrum) in the future.

| parameter            | Details                                                  |
|----------------------|----------------------------------------------------------|
| Token Name           | DAP Token                                                |
| Token Symbol         | DAP                                                      |
| Blockchain Framework | Ethereum (ERC-20)                                        |
| Total Supply         | 1,000,000,000 DAP                                        |
| Initial circulation  | 100,000,000 DAP                                          |
| Contract Address     | To be disclosed following the deployment of the mainnet. |



## 3. TOKEN ALLOCATION PLAN

### 3.1 Token Allocation Overview



| Assignment                  | Proportion | Quantity (DAP) |
|-----------------------------|------------|----------------|
| Private placement round     | 10%        | 100,000,000    |
| Public Offering/IEO         | 10%        | 100,000,000    |
| team                        | 15%        | 150,000,000    |
| Consultants and Cooperation | 5%         | 50,000,000     |
| Environmental Fund          | 30%        | 300,000,000    |
| Community and Airdrop       | 10%        | 100,000,000    |
| Reserve Fund                | 20%        | 200,000,000    |



## 3. TOKEN ALLOCATION PLAN

### 3.2 Unlocking Mechanism

#### Private placement round

10%

- Lock-up period: 3 months (after TGE)
- Release method: 12-month linear release (about 8.33M DAP per month)
- Purpose: To ensure that early investors are aligned with the long-term interests of the project and avoid short-term selling pressure.

#### Public Offering/IEO

10%

- Unlocking method: All will be released at TGE (Token Generation Event)
- Purpose: Provide initial liquidity and promote market transactions.

#### team

15%

- Lock-up period: 12 months (after TGE)
- Release method: 24-month linear release (about 6.25M DAP per month)
- Purpose: To bind the team and the project for long-term development and avoid short-term cashing out.



## 3. TOKEN ALLOCATION PLAN

### 3.2 Unlocking Mechanism

#### Consultants and Cooperation



- Lock-up period: 6 months (after TGE)
- Release method: 12-month linear release (about 4.17M DAP per month)
- Purpose: To encourage consultants and partners to continue to contribute value.

#### Environmental Fund



- Release method: Allocated on demand, used for the following directions: developer incentives (Grants, hackathon rewards), protocol upgrades and multi-chain expansion (such as Polygon, Arbitrum integration), strategic cooperation (such as content platform, API service provider access)
- Management mechanism: The DAO community votes to decide on major fund uses.

#### Community and Airdrop



- Release method: distributed in stages through the following channels: early adopter airdrops (after the mainnet launch), liquidity mining rewards, community activity rewards
- Purpose: expand the user base and increase the adoption rate of the protocol.

# 3. TOKEN ALLOCATION PLAN

## 3.2 Unlocking Mechanism

### Reserve Fund



- Release method: Managed by the foundation, used for: liquidity support in extreme market situations, security audits and emergency response, future strategic investment (such as acquisition of complementary agreements)
- Unlocking restrictions: A maximum of 5% of the total amount can be used each year, which requires DAO voting.

## 3.3 Token Allocation Principles



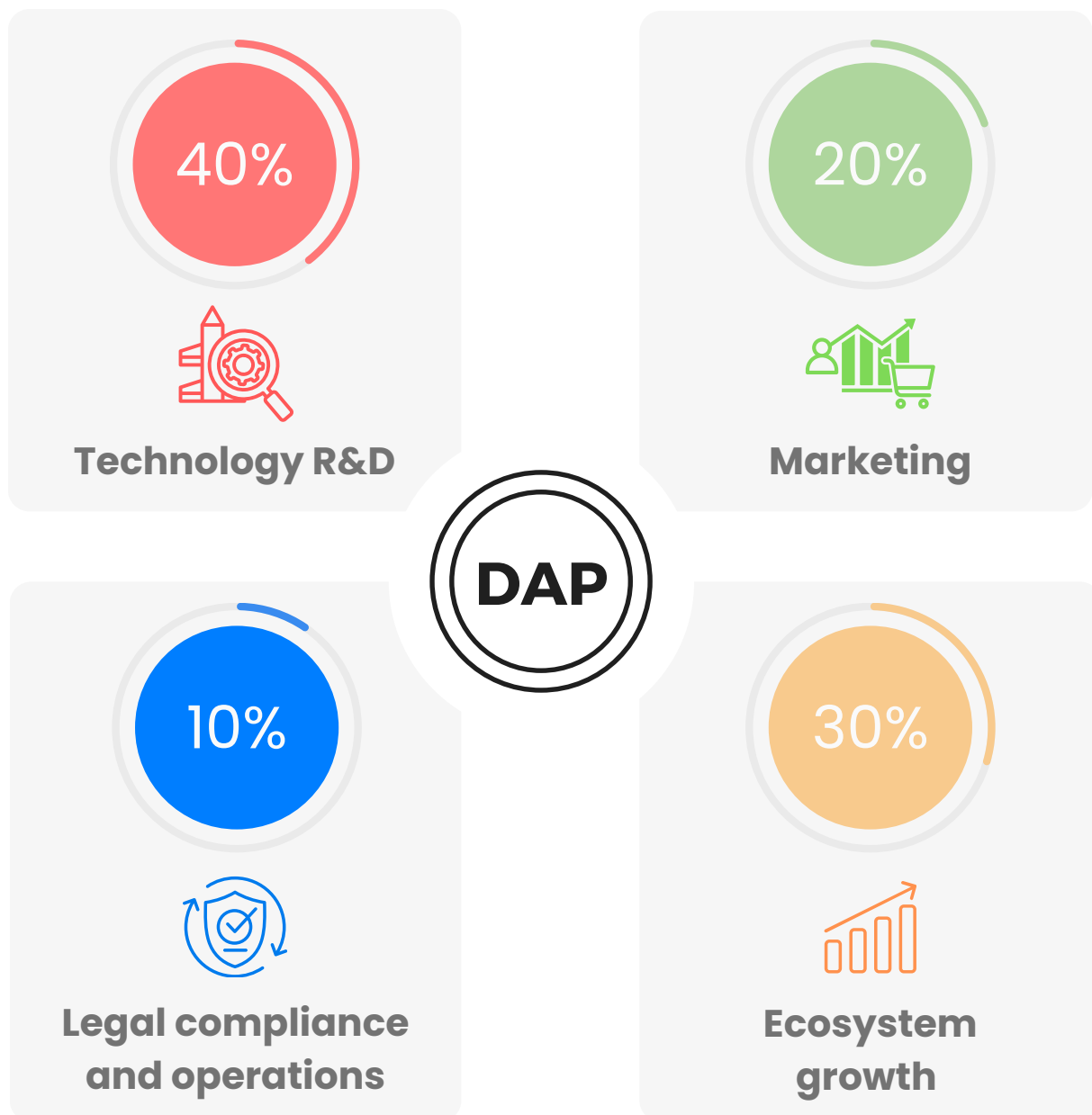
- Long-term orientation: Core shares such as team and private placement adopt long lock-up period to avoid short-term selling.
- Ecological priority: 30% ecological fund ensures continuous iteration of the protocol and prosperity of the developer ecosystem.
- Community driven: 10% community allocation is used to incentivize real users, not short-term speculators.
- Risk hedging: 20% reserve fund enhances the ability to resist market fluctuations.



## 4. FINANCING PLAN

### 4.1 Financing Overview

The DAP project will ensure protocol development and ecosystem construction through multiple rounds of financing, combining private placement and public (IEO) rounds, with a total financing target of US\$2 million. The financing funds will be mainly used for:



## 4. FINANCING PLAN

### 4.1 Financing Overview

#### Private placement round (completed)

| project                | Details                                                                             |
|------------------------|-------------------------------------------------------------------------------------|
| Financing ratio        | 10% of the total supply (100,000,000 DAP)                                           |
| Financing Cost         | \$0.015/DAP                                                                         |
| Locking apparatus      | 3 months of complete lockup followed by 12 months of gradual release                |
| Participation criteria | Qualified Investors (Minimum investment of \$50,000)                                |
| Utilization of funds   | Core protocol advancement, preliminary team growth, initial ecosystem collaboration |

#### Public offering round (IEO plan)

| project                 | Details                                        |
|-------------------------|------------------------------------------------|
| Platform Candidates     | Binance Launchpad, OKX Jumpstart, Gate Startup |
| time                    | Q3 2025 (tentative)                            |
| Financing ratio         | 10% of the total supply (100,000,000 DAP)      |
| Issue Price             | \$0.02/DAP                                     |
| Target financing amount | \$2,000,000                                    |
| Accepted currencies     | USDT、ETH、BTC                                   |
| Unlocking procedure     | 100% circulation at TGE                        |

# 4. FINANCING PLAN

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## 4.2 Fund Management

- Custody plan: Use a multi-signature wallet (Gnosis Safe), and 3/5 core members must sign before using funds
- Audit: Publish the fund address after the financing is completed, and disclose the use of funds quarterly
- Emergency reserve: 20% of the fundraising amount (\$400,000) will be transferred to the DAO treasury for emergencies

## 4.3 Investor Rights

Private placement investors:

- Get early community governance weight
- Priority participation in node operation
- Priority access to technical documents

IEO participants:

- Airdrop rewards (holding snapshot)
- Fee discounts (in the future DAP ecosystem)
- Governance proposal rights (after the holding amount reaches the target)

Expected return on investment:

| Scenario                        | Return on Investment Calculation (\$0.02/DAP) |
|---------------------------------|-----------------------------------------------|
| Conservative estimate (1 year)  | Target price \$0.05 (2.5x)                    |
| Neutral Estimate (24 months)    | Target price \$0.12 (6x)                      |
| Optimistic projection (3 years) | Target price \$0.30 (15 times)                |



## 5. TECHNICAL HIGHLIGHTS

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### 5.1 Decentralized Access Control Architecture

The DAP protocol builds a groundbreaking three-layer permission verification system, which completely changes the traditional centralized access control model.

#### Identity Layer:

- Decentralized identity system based on W3C DID standard
- Supports Ethereum EOA/smart contract wallet, biometrics, OAuth 2.0 hybrid login
- Verifiable credentials (VC) enable cross-platform identity reuse

#### Protocol layer:

Modular smart contract architecture, including:

- Authorization management contract (RBAC+ABAC hybrid model)
- Billing settlement contract (supports time/volume/subscription system)
- Arbitration contract (dispute resolution)

#### Application layer:

- Lightweight DAP SDK (<50KB)
- Supports mainstream frameworks such as React, Vue, Flutter, etc.
- Developer dashboard monitors API calls in real time

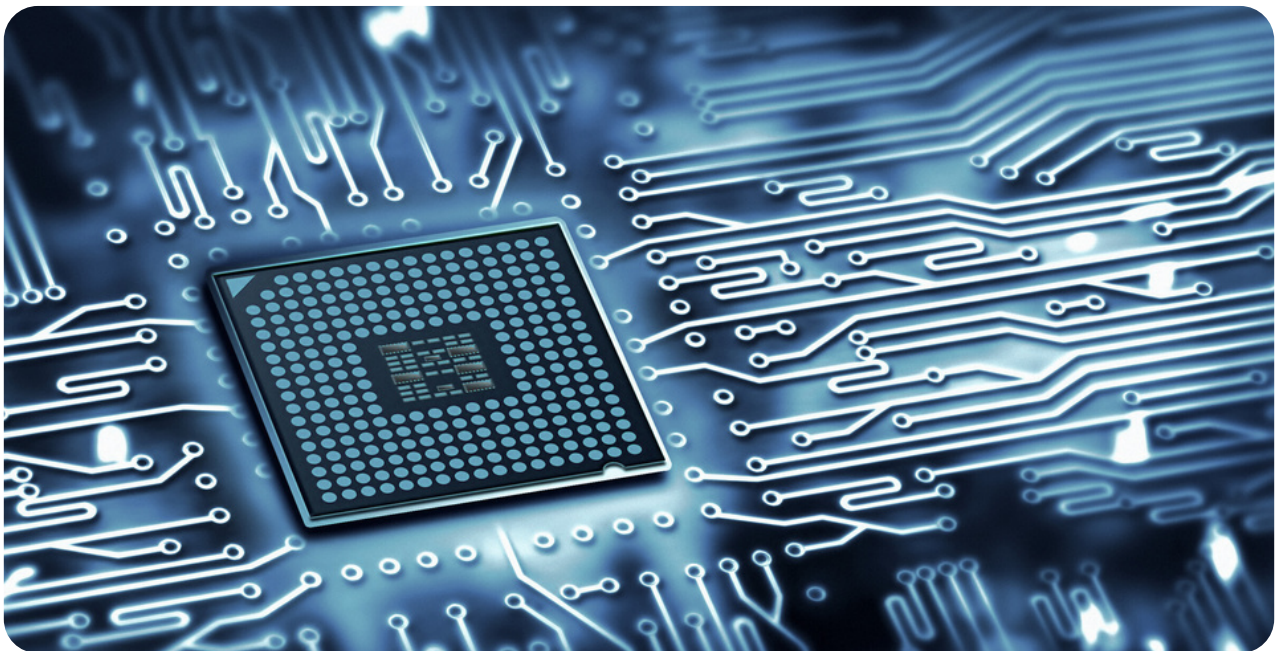


## 5. TECHNICAL HIGHLIGHTS

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### 5.2 Zero-knowledge proof integration

We have made a major breakthrough in privacy protection, achieving unprecedented secure access control through zero-knowledge proof technology.



Implementation plan:

- Use Circom language to build zk circuits

Typical application scenarios:

- Privacy access verification: prove that the user meets the permission requirements without revealing the specific identity
- Data availability proof: verify the authenticity of off-chain data
- Anti-sybil attack: anonymous but verifiable unique identity

Performance optimization:

- Groth16 proof generation time <300ms (normal server)
- Verification Gas cost reduced by 60% vs. traditional solutions

## 5. TECHNICAL HIGHLIGHTS

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### 5.3 Multi-chain interoperability engine

The DAP protocol's multi-chain interoperability engine represents the cutting-edge development of blockchain technology, enabling a truly seamless cross-chain experience.

Technology stack:

- Universal messaging based on CCIP (Cross-Chain Interoperability Protocol)
- Currently supported networks:

| Network  | Function               | TPS   |
|----------|------------------------|-------|
| Ethereum | Main Settlement Layer  | 15    |
| Polygon  | High Frequency Trading | 2000+ |
| Arbitrum | Complex Logic          | 4000+ |

Ethereum, as the main settlement layer, handles the core value transfer and important authority changes; Polygon network is responsible for high-frequency trading scenarios, supporting 2,000+ transactions per second; Arbitrum focuses on complex logical operations, with a theoretical TPS of 40,000+. This multi-chain architecture design ensures optimal performance in different scenarios.

Innovative features:

- Atomic cross-chain permission synchronization (completed in less than 5 seconds)
- Fees payment mechanism (allowing third parties to pay for Gas)



## 5. TECHNICAL HIGHLIGHTS

### 5.4 Security Architecture

The security architecture of the DAP protocol meets military-grade standards.

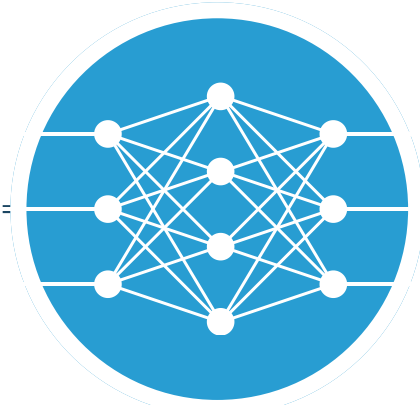
The smart contract has passed the dual audit of CertiK and OpenZeppelin, and adopts the Diamond Pattern to support safe hot upgrades, ensuring that the protocol can continue to evolve without affecting existing functions. At the network layer, we deploy the Threshold Signature Scheme (TSS) to protect key security, and use the IPFS+Filecoin distributed storage system to ensure the immutability of logs.

#### Defense system



##### Smart Contracts

- Passed dual audits by CertiK and OpenZeppelin
- Adopted Diamond Pattern to support hot upgrades



##### Network Layer

- Threshold Signature Scheme (TSS) protects keys
- IPFS+Filecoin distributed storage log



## 6. CORE TEAM

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### 6.1 Founding Team



#### Alex Wang

CEO Decentralized Access Protocol

- Former Tencent Security Product Director
- Blockchain Entrepreneur

Before joining the Web3 field, Alex served as the product director of Tencent Security, where he led the development of an enterprise-level security protection system that blocks 1 billion attacks per day.

After transitioning to the blockchain industry in 2018, he founded two security auditing companies, audited more than 200 smart contract projects, and discovered and fixed a number of high-risk vulnerabilities including reentrancy attacks and integer overflows. In the DAP project, Alex is responsible for overall strategic planning and ecosystem construction, and his deep security background provides a solid guarantee for the protocol architecture.

- **Wrote the "Smart Contract Security Development Guide" which was included in the Ethereum Foundation**

- **Holds top security certifications such as CISSP and CISA**



## 6. CORE TEAM

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### 6.1 Founding Team



#### James Li

CFO Decentralized Access Protocol

- Cryptoeconomics expert
- Former Sequoia Capital analyst

James holds an MBA from the Wharton School of Business. In the DAP project, James designed the token economic model and governance mechanism. His innovative "tiered pledge discount" system not only ensures network security but also improves token utility.



#### Maria Chen

CTO Decentralized Access Protocol

- Ethereum core developer
- Web3 protocol architect

Maria is one of the core contributors to Ethereum in its early days and is now the technical soul of DAP. Maria designed the multi-chain architecture and zero-knowledge proof system of the protocol. Her patented technology "dynamic permission zk circuit" has greatly improved the verification efficiency.



## 6. CORE TEAM

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### 6.2 Team Advantages

#### **Balanced composition structure:**

- Technology: security + cryptography + smart contract experts
- Products: exchanges + wallets + developer tool experience
- Business: investment + marketing + compliance talents

#### **Proven Execution:**

- The total valuation of the core members' past projects exceeds US\$5 billion, and they have received cumulative investments from top institutions including a16z and Sequoia.

#### **Continuous talent development:**

15% of the ecological fund will be used for team expansion each year, with a focus on recruiting:

- Rust underlying development engineers
- Cryptology researchers
- Developer relations experts

#### **Transparent Governance:**

- The team members' token lock-up period is up to 36 months, which is deeply tied to the long-term development of the project. Development progress reports are released monthly, and key decisions are made through DAO voting.



## 7. ROADMAP

### 2025 Roadmap

- Q2: Testnet + developer tools
- Q3: Mainnet + IEO + DApp access
- Q4: Cross-chain + DAO + staking rewards
- Goal: 1500+TPS, 3 million ecological funds, 200+ developers

#### Q2 2025

- Testnet launched
- Developer SDK released
- Private offering launched

#### Q3 2025

- Mainnet 1.0 launched
- IEO public offering
- First DApp integration

#### Q4 2025

- Polygon/BSC multi-chain support
- DAO governance launched

#### 2026

- DAOOracle integration
- Supports on-chain data verification and NFT authorized access

### 2026 Roadmap

#### Q1-Q2

- Hardware wallet integration (Ledger/Trezor)
- Oracle data market launched

#### Q3-Q4

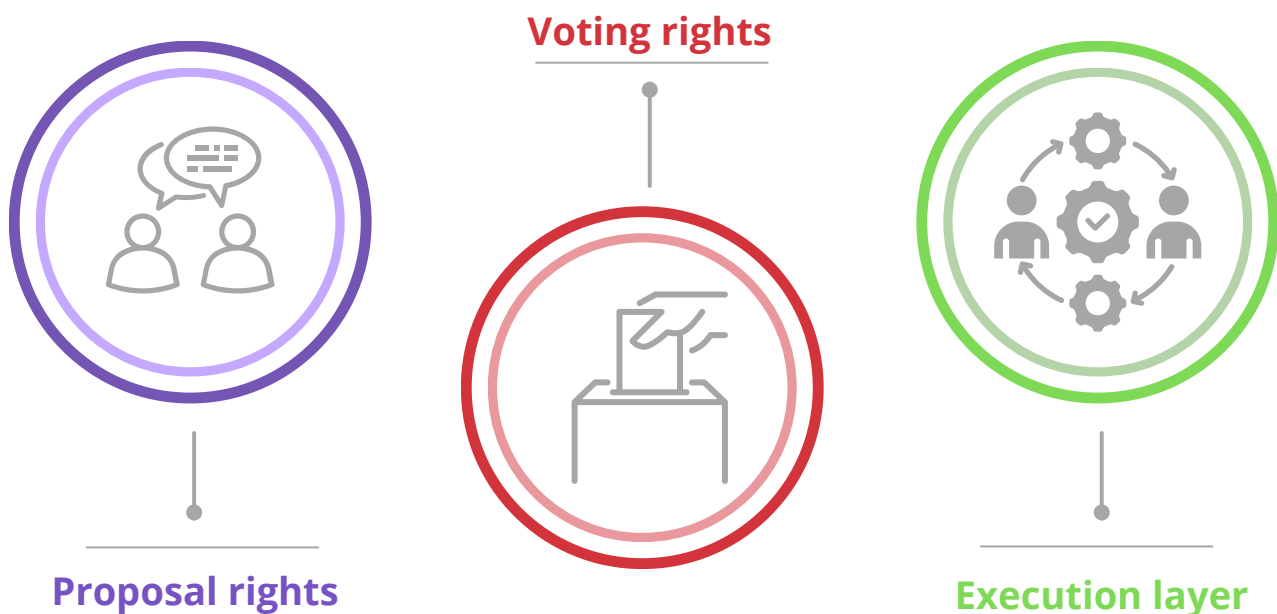
- 10+ cross-chain support achieved
- NFT leasing agreement implemented
- Daily average API calls exceeded 100 million times



## 8. COMMUNITY AND GOVERNANCE

### 8.1 Decentralized Governance Framework

#### DAP DAO core mechanism:



- Proposal rights: staking 5,000 DAP can initiate a proposal
- Voting rights: 1 DAP = 1 vote, support delegated voting
- Execution layer: a 9-member technical committee is responsible for code implementation

#### Governance process optimization:

- Proposal discussion period: 5 days (Discourse forum)
- On-chain voting period: 3 days (using Snapshot)
- Cooling execution period: 24-hour safety buffer



## 8. COMMUNITY AND GOVERNANCE

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### 8.2 Community Incentive Program

#### Participation Rewards:

- Basic voting reward: 0.1% annualized (distributed by number of votes)
- Quality proposal reward: up to 5,000 DAP/item
- Vulnerability report reward: grading system (100–50,000 DAP)

#### Punitive measures:

- Malicious behavior: up to 20% of the staked amount will be fined
- Low-quality proposals: proposal rights will be suspended for 30 days

#### Ecological Development Fund:

30 million DAP distribution plan:

- Developer funding: 40% (quarterly distribution)
- Marketing: 30% (KPI assessment)
- Liquidity mining: 20%
- Emergency reserve: 10% (multi-signature management)



## 9. RISKS AND DISCLAIMERS

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### 9.1 Risk Factors

#### Technical risks

- Smart contract vulnerabilities may lead to capital loss (risk has been reduced through double audits)
- Cross-chain bridging has potential security threats (adopting a 24-hour monitoring mechanism)
- Zero-knowledge proof circuits may have design flaws (set up a \$500,000 bug bounty pool)

#### Market risks

- Token prices may fluctuate drastically (only 10% in circulation at the beginning)
- Impact of regulatory policy changes (20% reserve fund has been reserved to deal with it)
- Intensified competition among similar protocols (continuous technological iteration to maintain advantages)

#### Operational risks

- Loss of key team members (core members sign a 3-year lock-up period)
- Inefficient community governance (design of a hierarchical voting weight mechanism)
- Partner default (requires collateral smart contract custody)

# 9. RISKS AND DISCLAIMERS

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## 9.2 Compliance Statement

- **Governing Law:** The Foundation is registered in Singapore and is governed by Singaporean law
- **User Obligations:** Participants are responsible for ensuring compliance with the laws of their respective jurisdictions
- **Tax Liability:** Tax issues arising from token transactions are the sole responsibility of the user

## 9.3 Disclaimer

- There are uncertainties in technology development and the roadmap may be adjusted
- No return on investment is promised and past performance is not guaranteed
- Reserve the right to update the agreement without notice

## 9.4 Risk Mitigation Measures

- **Technical guarantee:** monthly security audit + automatic circuit breaker mechanism
- **Fund guarantee:** multi-signature wallet management (5/9 signature system)
- **Governance guarantee:** emergency suspension function (requires consent from 3/5 committee members)

**Last updated: May 2025**

**The right of interpretation belongs to DAP Foundation**

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