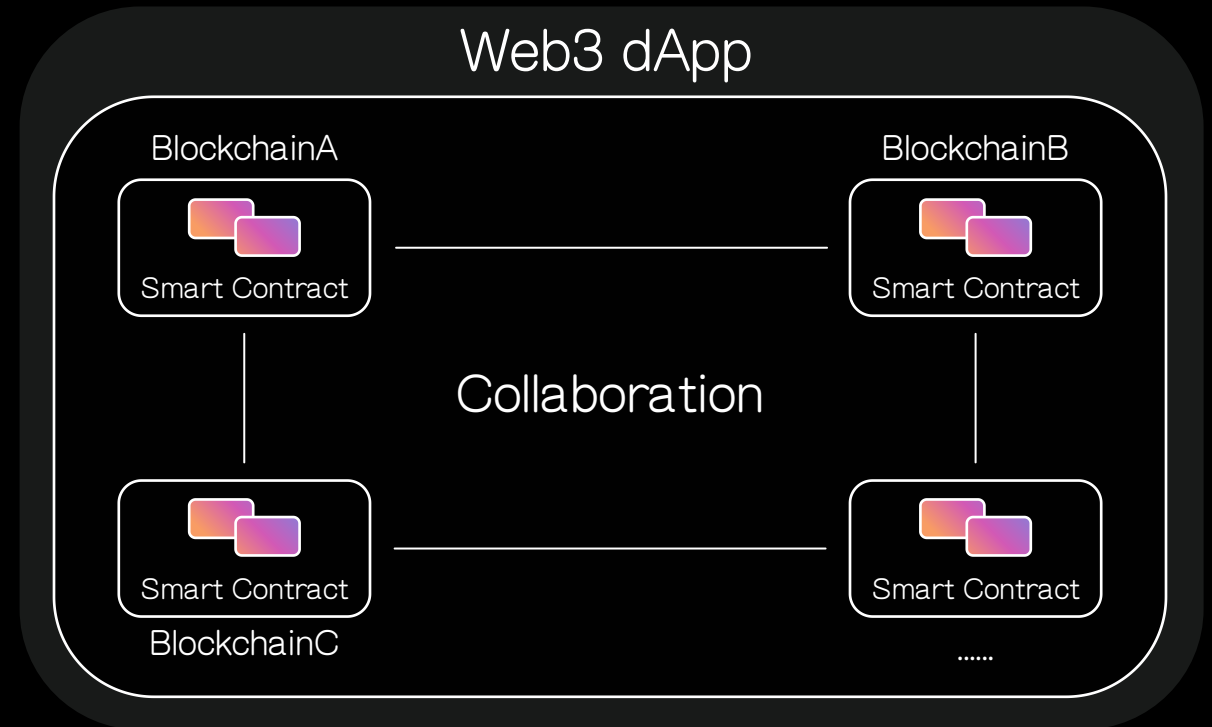# DANTE NETWORK

"Internet Protocol" of Web3

Dante Network

A middleware for Multi-Chain interoperability in Web3

In Dante Network, we will define and offer a general protocol stack to realize the interoperability and interconnection.
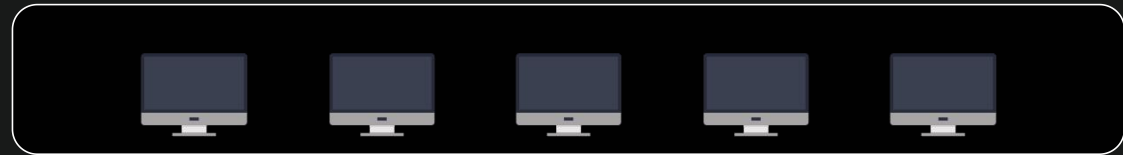
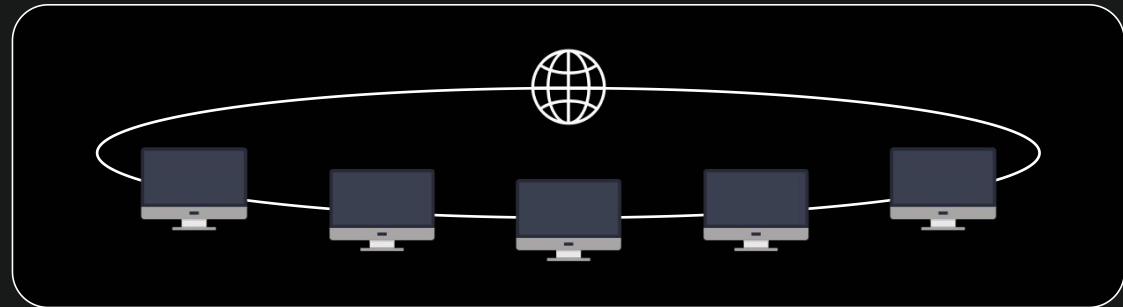This will bring innovative experiences in web3, just as Internet Protocol is for today's Internet.

Web3 dApp

BlockchainA

BlockchainB

Smart Contract

Smart Contract

Collaboration

Smart Contract

Smart Contract

BlockchainC

......

From a Computer to the Internet

Dante Network

BEFORE

Stand-alone or Lans

AFTER

Global Internet

Http/Https
TCP/IP
... ...

Hub
Switch
Router

From Blockchain to Web3
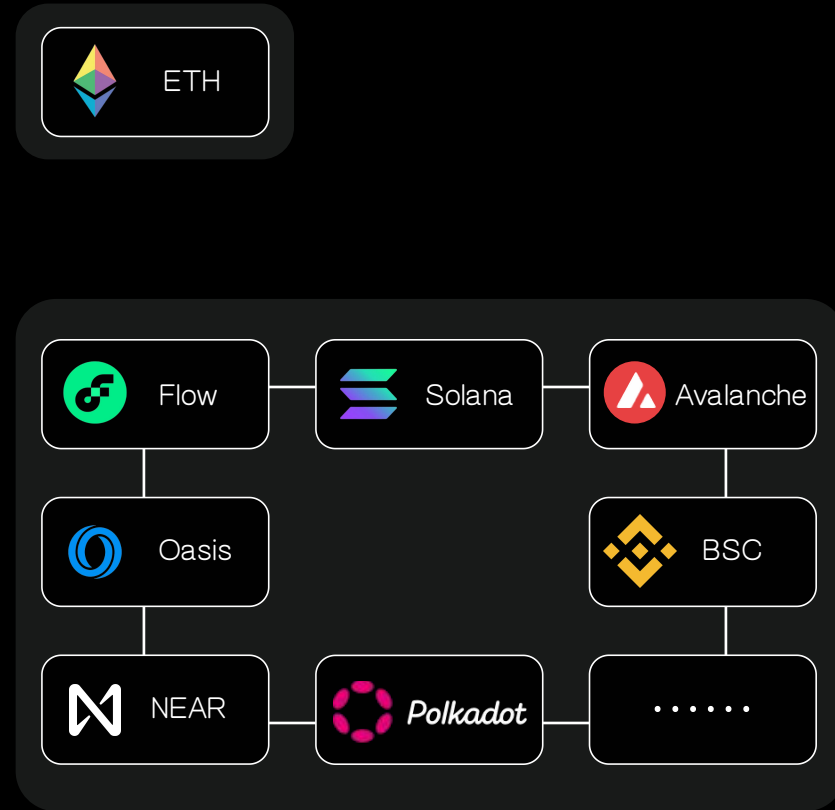
Ethereum – the World Computer

Web3 has more than one computer now

- Limited connection: e.g. Rainbow bridge on Near to connect ETH
- Some like MAN/LAN: e.g. Polkadot and Cosmos Ecosystem

Web3 needs more comprehensive connections as well as the Internet

ETH

Flow   Solana   Avalanche

Oasis   BSC

NEAR   Polkadot   ......

Problems

Simple use case

Most of them are just cross-chain token swap

Multichain

Stargate

Wormhole

WBTC

THORChain

Qredo

Heterogenous limitation

Interoperate between homogeneous chains
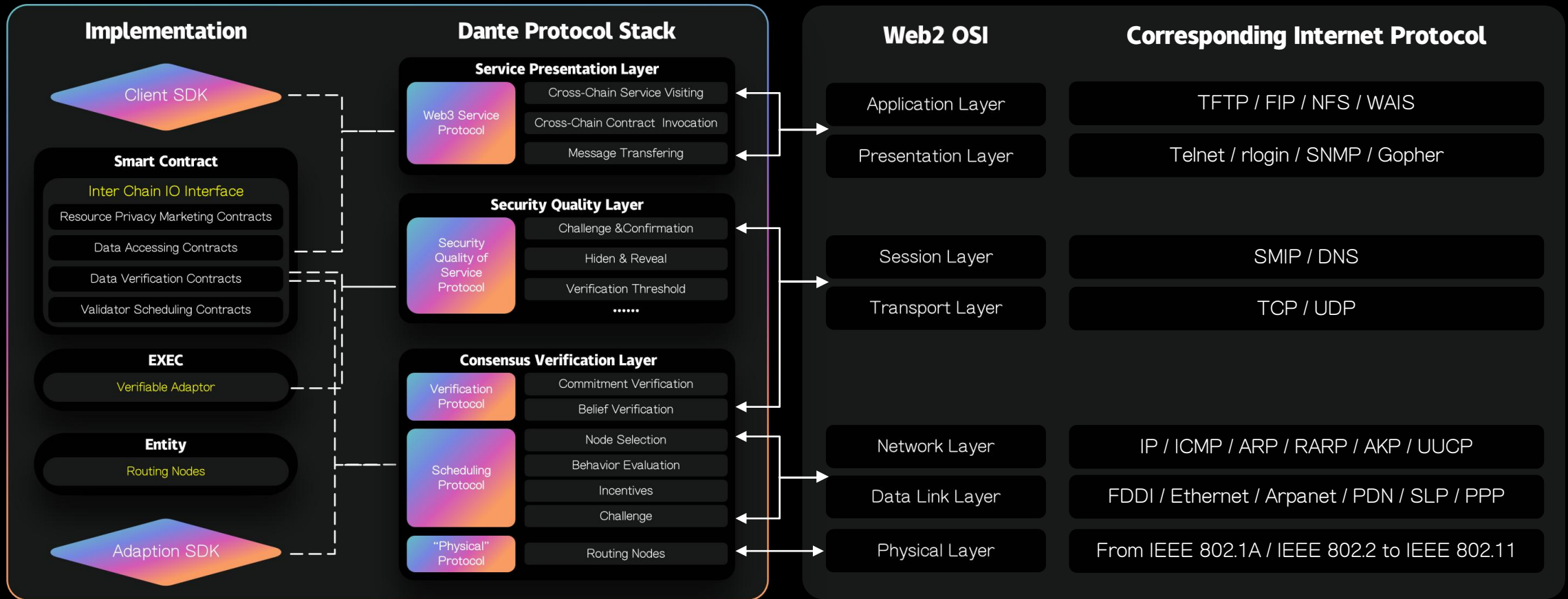
Acala

Moonbeam

Astar

Parallel

HydraDX

Composable Finance

Protocol Stack of Dante Network

Dante Network

Internet

Implementation

Dante Protocol Stack

Web2 OSI

Corresponding Internet Protocol

Client SDK

Service Presentation Layer

Web3 Service Protocol
- Cross-Chain Service Visiting
- Cross-Chain Contract Invocation
- Message Transfering

| Application Layer | TFTP / FIP / NFS / WAIS |
| Presentation Layer | Telnet / rlogin / SNMP / Gopher |

Smart Contract

Inter Chain IO Interface
- Resource Privacy Marketing Contracts
- Data Accessing Contracts
- Data Verification Contracts
- Validator Scheduling Contracts

Security Quality Layer

Security Quality of Service Protocol
- Challenge &Confirmation
- Hiden & Reveal
- Verification Threshold
- ......

| Session Layer | SMIP / DNS |
| Transport Layer | TCP / UDP |

EXEC

Verifiable Adaptor

Consensus Verification Layer

Verification Protocol
- Commitment Verification
- Belief Verification

Entity

Routing Nodes

Scheduling Protocol
- Node Selection
- Behavior Evaluation
- Incentives
- Challenge

| Network Layer | IP / ICMP / ARP / RARP / AKP / UUCP |
| Data Link Layer | FDDI / Ethernet / Arpanet / PDN / SLP / PPP |

Adaption SDK

"Physical" Protocol
- Routing Nodes

| Physical Layer | From IEEE 802.1A / IEEE 802.2 to IEEE 802.11 |

Dante Network

Dante Network Flow

Dante Network

Dante Security Quality of Service

Horizontal:
Random
Threshold;
Send/Receive isolation;
......

Vertical:
Challenge
Selection delay
Hidden &Reveal
......

Consensus space of Chain A

Consensus space of Chain B

Smart Contract Invocation

Dante session

ICIOI in Chain A

Dante
Verification
Consensus

ICIOI in Chain B

Dante
Verification
Consensus

Bi-direction verification

Dante parallel Routing Mechanism

Dante SDK

Dante Network

DApps On Chain A

DApps On Chain B

Client SDK

Client SDK

Dante Network

Interoperability
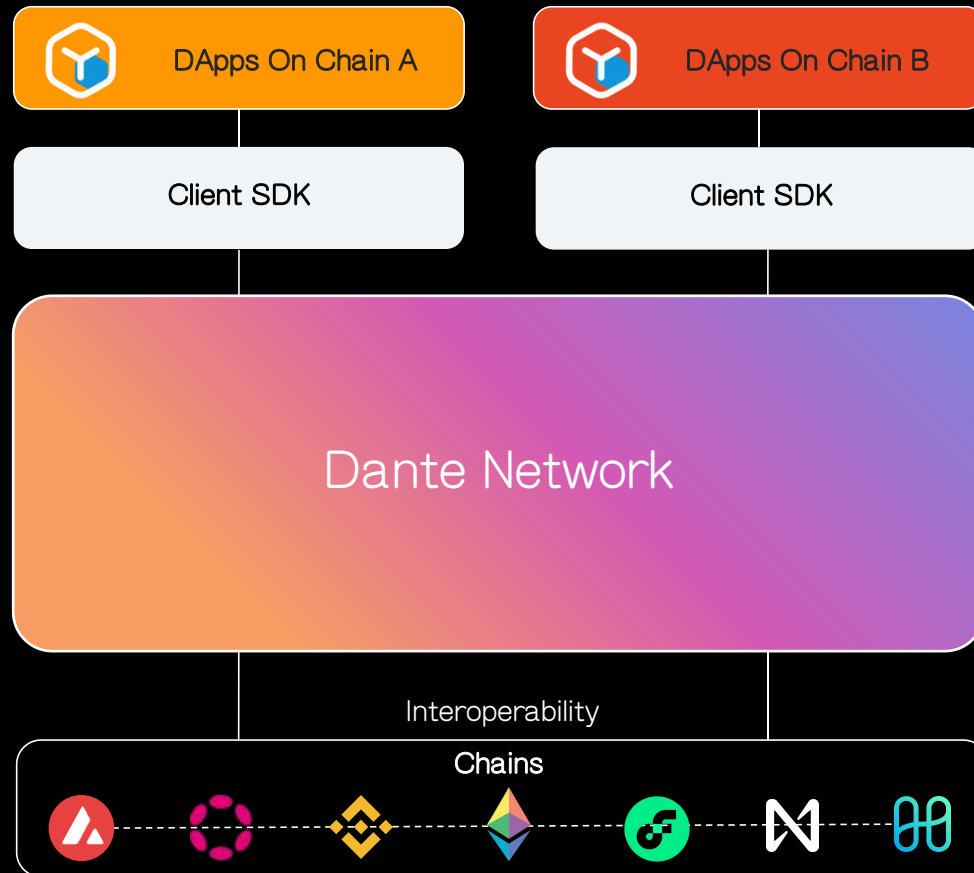
Chains

Client SDK for Dapps

The Client SDK provides dApps development support, through which dApps will be able to **directly call Dante Network's multi-chain services**, thus enabling dApps to realize information synchronization and smart contract calls among multiple chains.

Advantages of Dante Network

"Internet" of Web3

Comprehensive interoperability

Smart contract level, not only token

Higher security level

Less security assumption

Excellent adaptability

Configurable interoperability strategy

Better scalability

Easier and more reliable for sharding

Use Cases-Omnichain NFT
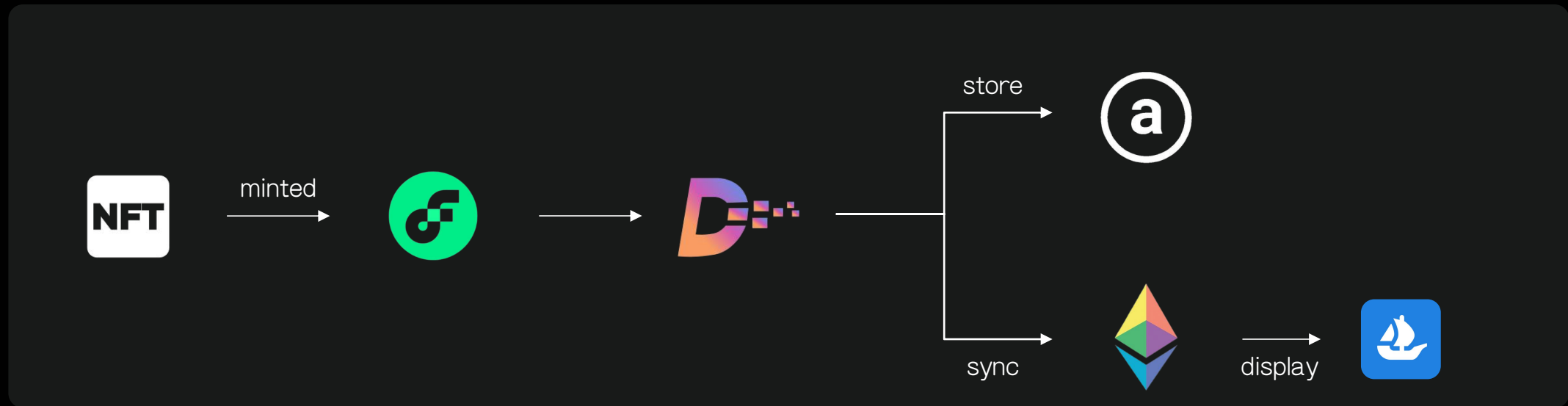
Allow more chains to access to the Arweave storage ability

https://dante-network.oss-cn-hangzhou.aliyuncs.com/Special%20router%20serves%20for%20storage%20on%20Arweave.mp4

NFT minted on Flow can be accessed from Ethereum (OpenSea)

https://dante-network.oss-cn-hangzhou.aliyuncs.com/NFT%20on%20Flow%20extends%20to%20Opensea.mp4

Use Cases-Outsourcing computation

place
an order

results fetch

... ...

privacy-preserving
computing
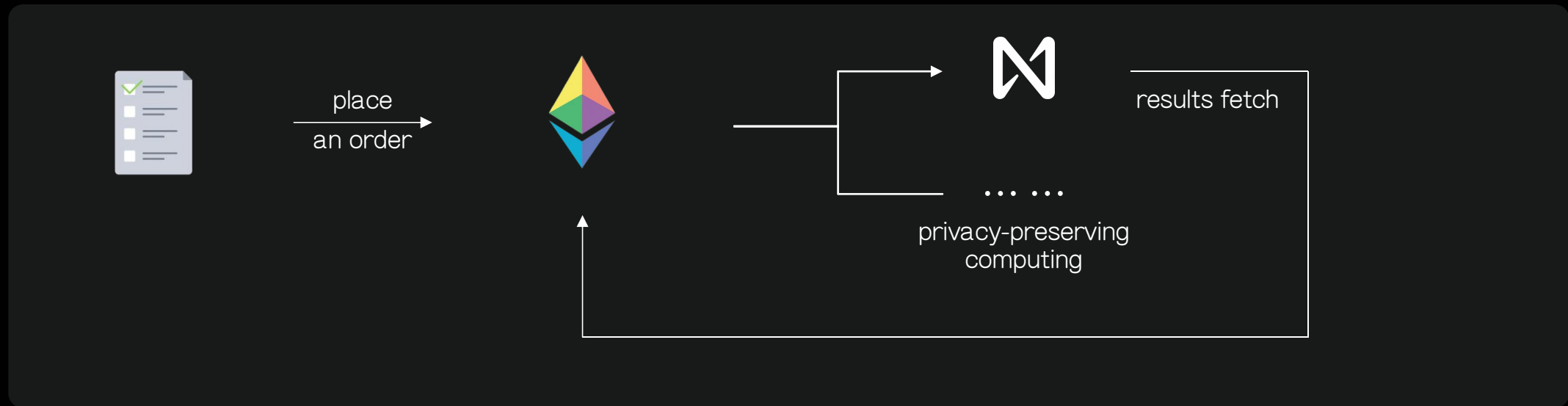
Greeting & Computation Demo

https://dante-network.oss-cn-hangzhou.aliyuncs.com/Prototype_Multichain_SmartContract_invocation%20.mp4

Use Cases-Omnichain DEX

Dante Network

Dante swap

https://demo-swap-theta.vercel.app/

RoadMap

GTM

Strategy: Promotion, guidance and cultivation of users' habits
1 ）Developer research and support
2 ）Bug bounty plan
3 ）Build strategic partnership and PR
4 ）Build demonstration applications

Strategy: solid tech foundation build, maintain high-quality service and increase visibility
1 ）Provide developer support
2 ）Track hotspots and increase interaction
3 ）Build strategic partnership and PR

Strategy: stady stable and avoid mistakes
1 ）Standalizing and normalizing
2 ）Community DAO
2 ）New direction exploring

Primary stage: the demand of the product is released into the market for the first time. Market is not very active.

Growth stage: the demand is increasing, and the competition for the product is high.

Mature stage: the market is largely saturated.

Tech

Q3 2022
- Complete primary protocol stack development
- Launch closed beta test of Testnet
- Support EVM chain, WASM chain, and other chains with special functions

Q4 2022
- Client SDK v1.0 stable release
- Realse relevant developers doc and provide tech support
- Support dApps to build omnichain application

Q1-Q2 2023
- Consistant network and protocol optimaization according to the network performance
- Provide node program, support public node access
- Launch open beta test of Testnet

Q3-Q4 2023
- Mainnet online
- Adaption SDK v1.0 stable release
- Support developers to better be adopted to new chains
- Realse relevant developers doc and provide tech support

2024
- Coninuouis operating Mainnet
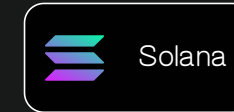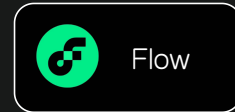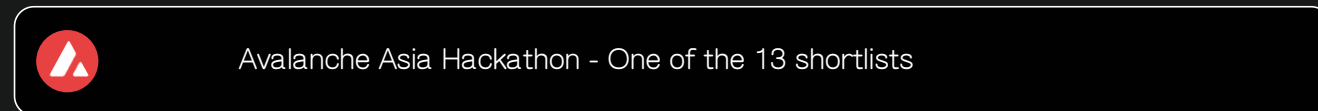- Provide sustainable developer support

2025
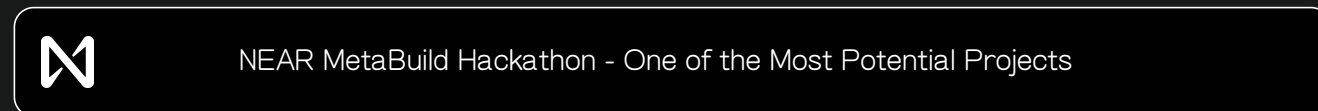
Progress

Dante Network

Adapted chains

ETH	NEAR	Polkadot	Avalanche

To be Adapted

Flow	Filecoin	Arweave	Solana

Grants & Hackathon

NEAR Grants	Flow Grants	Web3 Foundation Grants

Polkadot 2022 Summer Hackathon - 1st Prize

NEAR MetaBuild Hackathon - One of the Most Potential Projects

Avalanche Asia Hackathon - One of the 13 shortlists
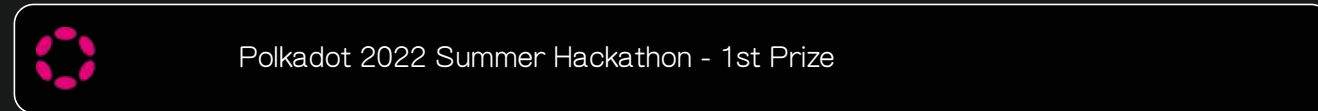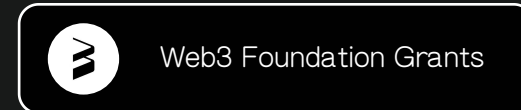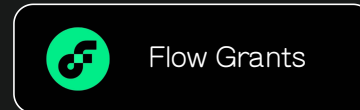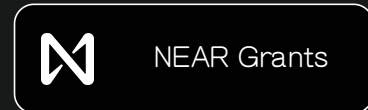
Partners

NFT

NearBots.near	NEARton
Chads on near	Billionaire Bulls Club

Meta Foxonry

Staking

Vaporwave.finance

KillSwitch

DeFi

KAVA

Nearpad

Channels.finance

Smart Contract

OAK Network

DEX

Cososwap

DAO

Metis

Perpetual Futures

Hubble exchange

Domain Service

Aurora Name Service

Contact Us

Dante Network

Official website: https://dantechain.com/

Twitter: https://twitter.com/DanteNetwork

Medium: https://medium.com/@dantenetwork

Telegram: https://t.me/DanteNetworkEN

Discord: https://discord.gg/sZeFJthprE

GitHub: https://github.com/dantenetwork

Email: murphy_l@dantechain.com