



# FIDES DVPN

WEB3 INFRASTRUCTURE

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WE HAVE MADE  
GREAT CHIEVEMENTS

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# Fides DVPN

web3 Infrastructure

FIDES means trust, honesty, faith, or loyalty. It is also the name of the goddess of faith in Roman mythology.

# FIDES INTRODUCE



## What is Fides DVPN

The FIDES DVPN creates infrastructure to decentralize VPNs while protecting networks and making them profitable by bandwidth farming for token rewards.

## Target Market

Sharding nodes with high throughput serve specific businesses  
Full stack encryption of business data  
High-quality distributed computing

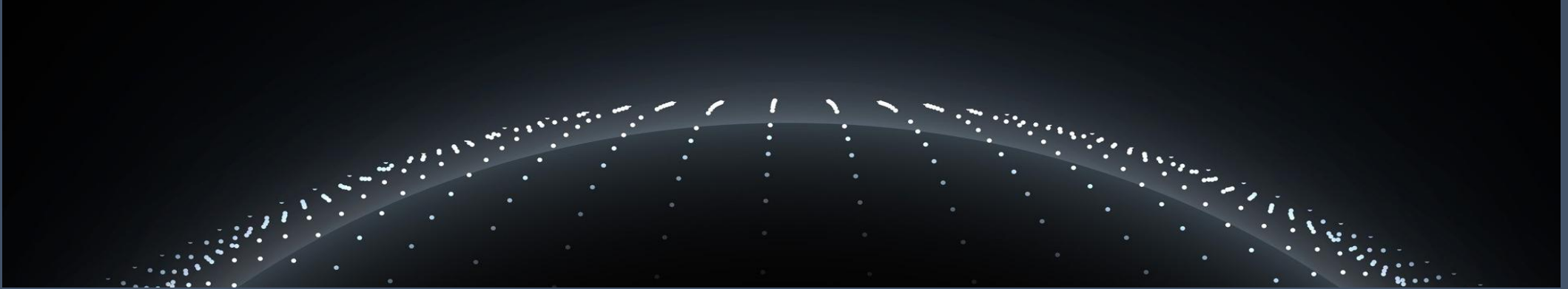
## Technical Features

Users who surf the internet with privacy protection and data bandwidth transmission.

## Vision

FIDES DVPN aims to build a decentralized, secure, efficient, and fair network connection platform.

# | Technical Features



FIDES DVPN combines advanced consensus and encryption algorithms, peer-to-peer protocols, token incentives, and DAO governance to provide users with a more free, private, and high-quality DVPN service.

# Fides DVPN Features

## Complex Calculations

### ◆ Distributed computing

The sharding network provides distributed computing power and performs distributed computing for complex model disassembly of molecular tasks.

### ◆ Multitasking in parallel

The workload sharding nodes are assigned tasks and aggregated task execution results by the computing task scheduling center

## Massive users capacity

### ◆ Low cost hardware

Any idle server equipment and bandwidth traffic can be used as nodes to provide services at low cost.

### ◆ High throughput

The sub-chain consensus sharding provides Fides with exclusive blockchain throughput, and the workload sharding provides data transmission and computing capabilities.

## Data privacy protection

### ◆ Security and privacy

The protocol subnet provides security for the blockchain, and full-stack encryption of network data transmission ensures application data security and privacy are protected.

### ◆ Resist single point of failure

Distributed multi-centralized nodes form a network cluster to prevent centralized blockade and no intermediate data is retained.

## High scalability & flexible combination

### ◆ Module combination

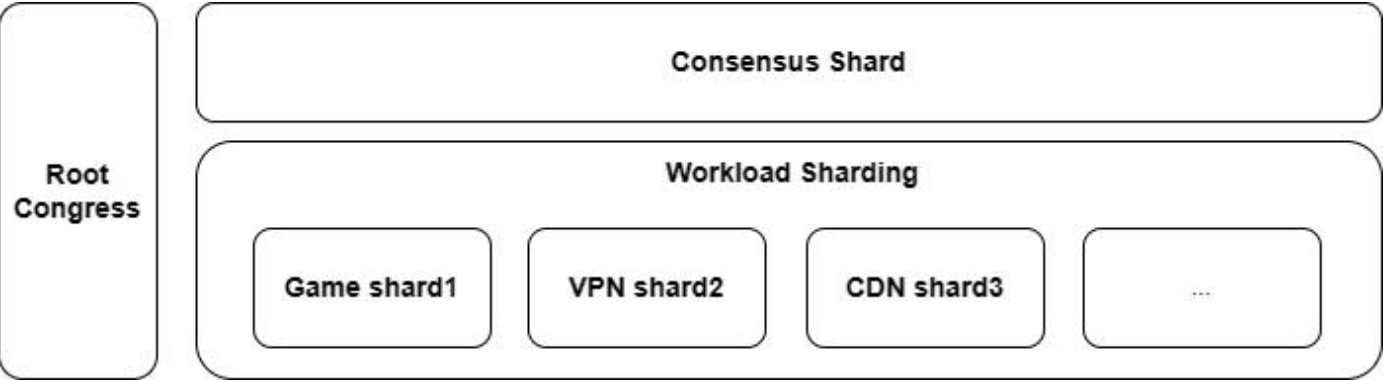
Can be combined to provide privacy security and network acceleration for applications, and serve cross-border and cross-regional computing power distribution

◆ High network scalability  
Workload sharding network nodes can add new features, new functions, and are easy to expand



The sharding architecture provides powerful computing power and encryption features

## Consensus Congress



## CBP Algorithms

Consensus Byzantine Paradigm

FTS+POS, Responsible for building the main chain sharding consensus network and the business sharding network through election, as well as verifying new nodes joining, monitoring node consensus, and rotating node election and other functions

## Workload Shard

A main chain sharding consensus network, with 600 members per shard, using the security mechanism of Zilliqa

## Service Shard

The sharding network maintains a consensus block of a local-channel, which is guaranteed the it's own characteristics

# | Fides DVPN Network Node

## A Validator

- ◆ All nodes in the consensus shard form a set of validator to ensure that the consistency of blockchain transactions is verified and consensus reached.

## B Auditor

- ◆ Auditor ensures that the workload submitted by all workers in the workload shard is valid and correct, and submits a result of its own review to validator to prevent workers from submitting invalid or malicious workloads.

## C Worker

- ◆ Workers complete workloads such as data routing, forwarding, data storage, encryption/decryption, etc. A collection of network nodes in Fides network that complete specific tasks.

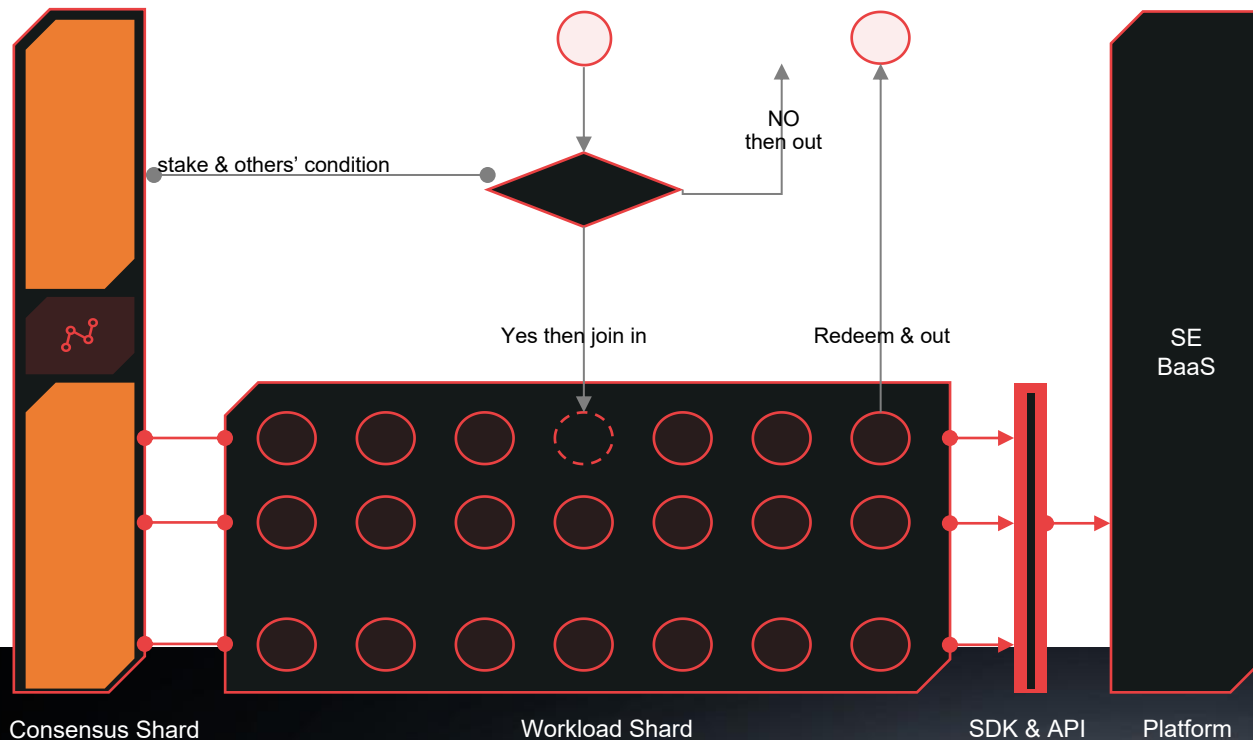


# Fides DVPN Network

Concus Shard(Block Validator) worker Shard (Auditor and worker)

WEB 3 SDK&API

SE Middleware



Validator - Pledge FDS

Auditor and Worker- Pledge FDS

Developers develop WEB3 service based on Fides SDK & API

Developers pay FDS as the transaction fee

User pay the FDS as the fee to access Internet

# Double encryption model

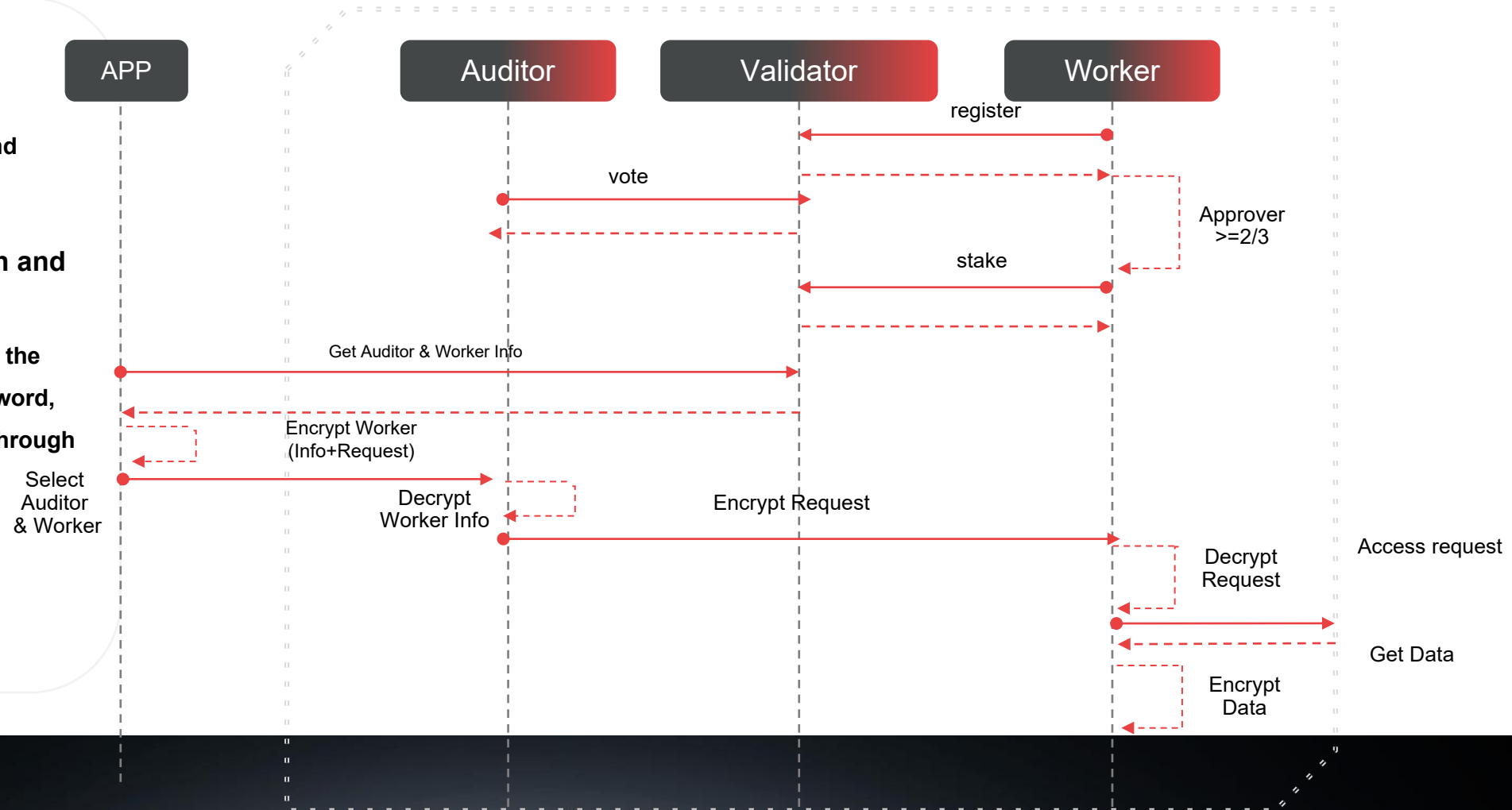
Internet

## ◆ ECDH Algorithm

The public key and APP private key generate passwords and encrypt and decrypt them through algorithms

## ◆ Signal and Data encryption and decryption Auditor

The public key of Worker node and the private key of APP generate a password, which is encrypted and decrypted through the algorithm.



# Flexible and high computing service

## ◆ Computing task

### decomposition

The platform delivery task to Auditor, and Auditor splits the task into multiple subtasks.

## ◆ Aggregate calculation

### results

The subtasks are delivered to the Worker node for calculation. After the calculation results are obtained, the settlement results are aggregated and transferred back to the Auditor and finally returned to the computing platform

