Chainlink

// CHAINLINK DEVELOPER EXPERTS

Deploy Your First Smart Contract and Consuming Data Feeds

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Agenda

1. Install and Fund MetaMask
2. Deploy Our First Smart Contract on Remix
3. What is Chainlink?
4. Deploy our Second Smart Contract Consuming Data Feeds
5. Wrap up and more info!

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// Building Cross-Chain with CCIP

Install and Fund Metamask

Tutorial Documentation

https://docs.chain.link/quickstarts/deploy-your-first-contract

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What Is Chainlink?

Oracles

The solution to the oracle problem

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The solution to the Oracle Problem: Consensus and global state gives us the source of truth

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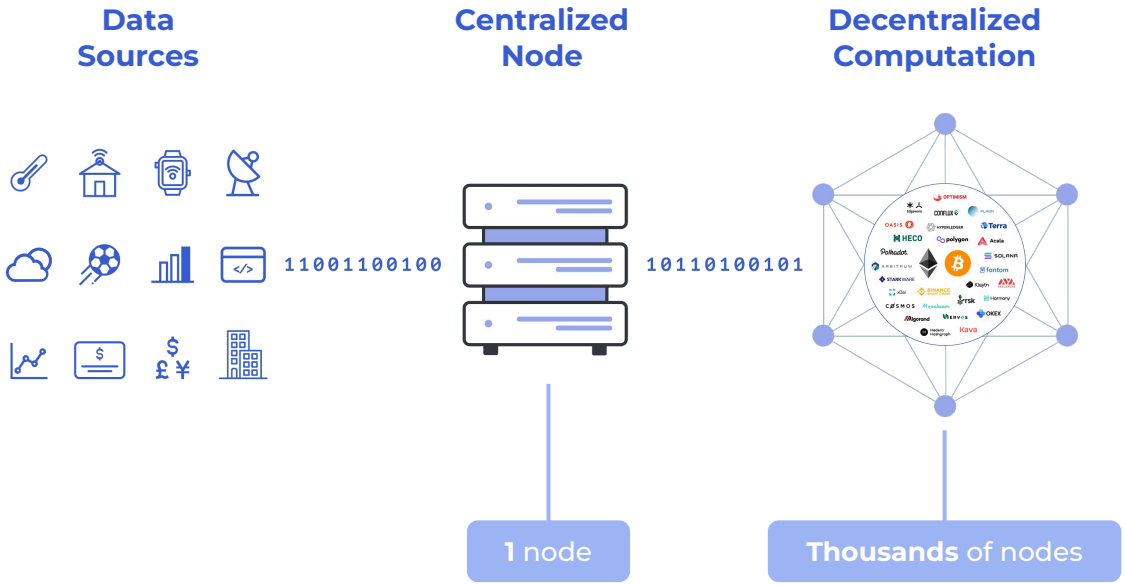
Centralized Oracles are a Point of Failure



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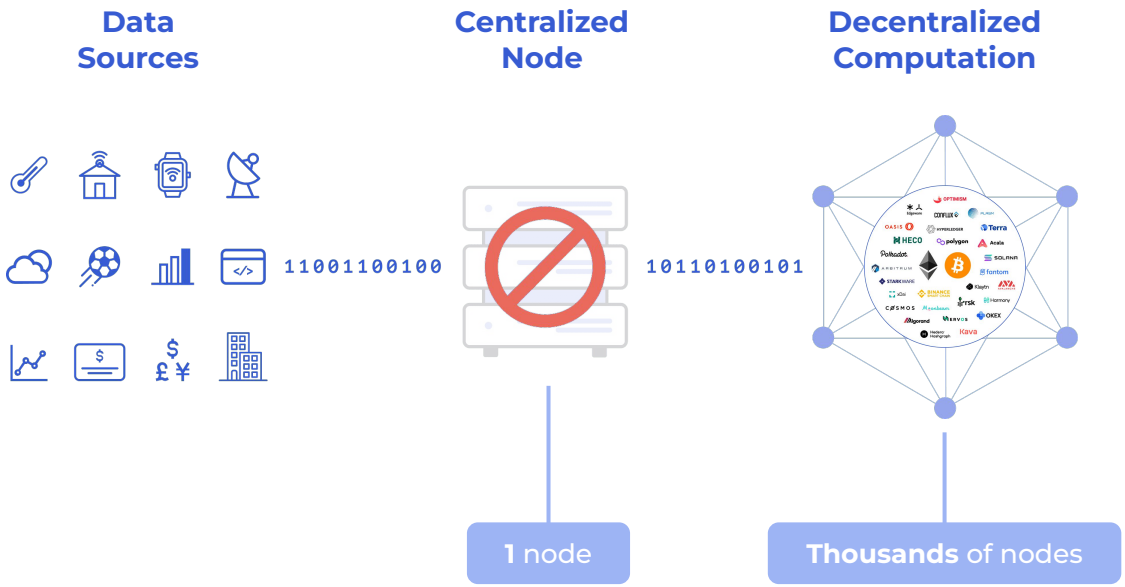
Centralized Oracles are a Point of Failure



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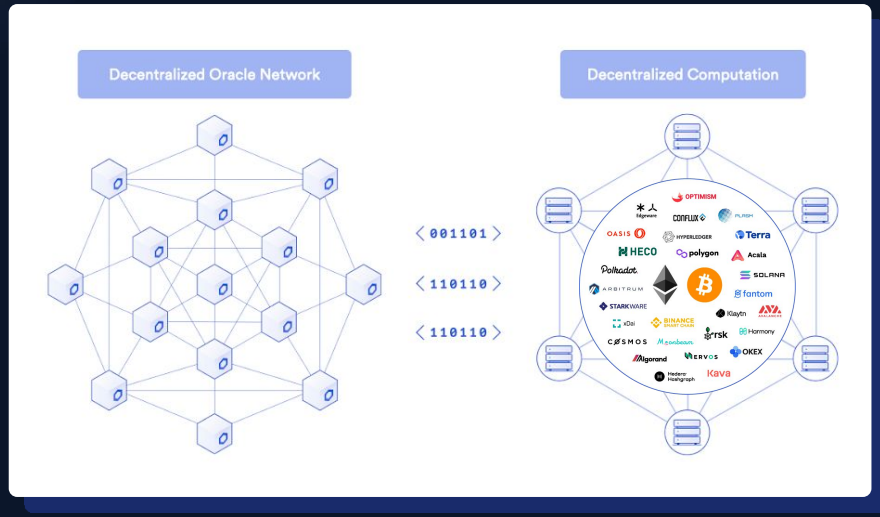
A Decentralized Oracle Network

Decentralization
Full replicas run by independent and sybil resistant node operators.

Focused on data validation and consensus.

Node Operators are security reviewed, can provide a proven performance history and are high quality and highly sybil resistant.



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Data Feeds

Secure and reliable access to real world data

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Chainlink VRF
(Verifiable Random Function)

Provably Random Numbers

Securing randomness for your applications

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Chainlink Automation

Decentralized event-driven execution

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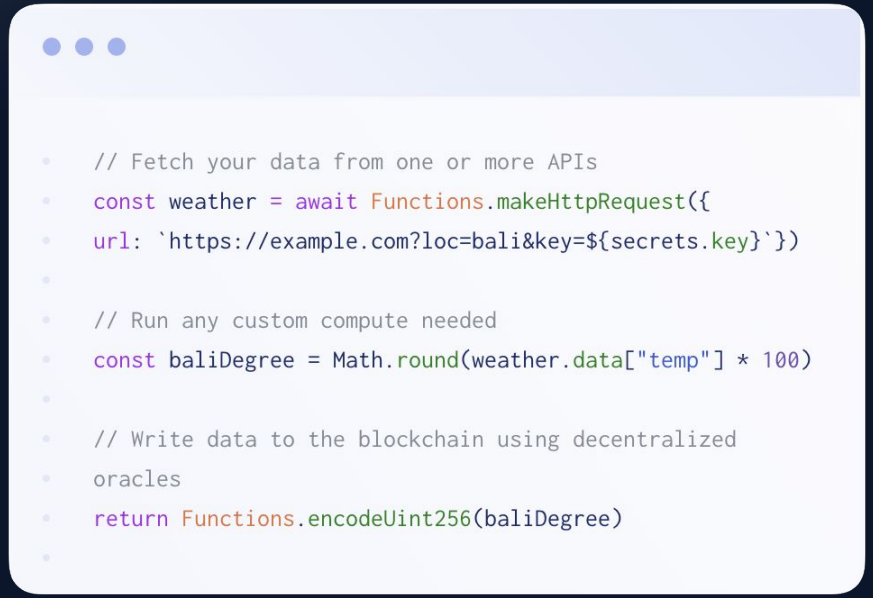
Chainlink Functions

Any data from any API and custom compute



```
// Fetch your data from one or more APIs
const weather = await Functions.makeHttpRequest({
url: `https://example.com?loc=bali&key=${secrets.key}`})

// Run any custom compute needed
const baliDegree = Math.round(weather.data["temp"] * 100)

// Write data to the blockchain using decentralized
oracles
return Functions.encodeUint256(baliDegree)
```

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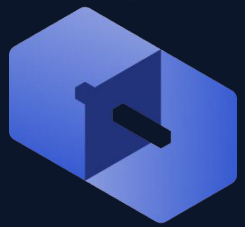
Chainlink Cross Chain Interoperability Protocol CCIP

Secure cross-chain applications



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// Deploying our Second Smart Contract

Consuming Data Feeds

- Walkthrough our Second Smart Contract
- Compile and Deploy!

Consuming Data Feeds Tutorial Documentation

https://docs.chain.link/data-feeds/getting-started

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Thank you!

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Presentation

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