

# 아올다

소프트웨어학과 오동재  
소프트웨어학과 이찬주  
소프트웨어학과 조성연

**주제: External Code로 작성된 Contract를 실행하는 Layer2 개발**

# 프로젝트 진행 배경



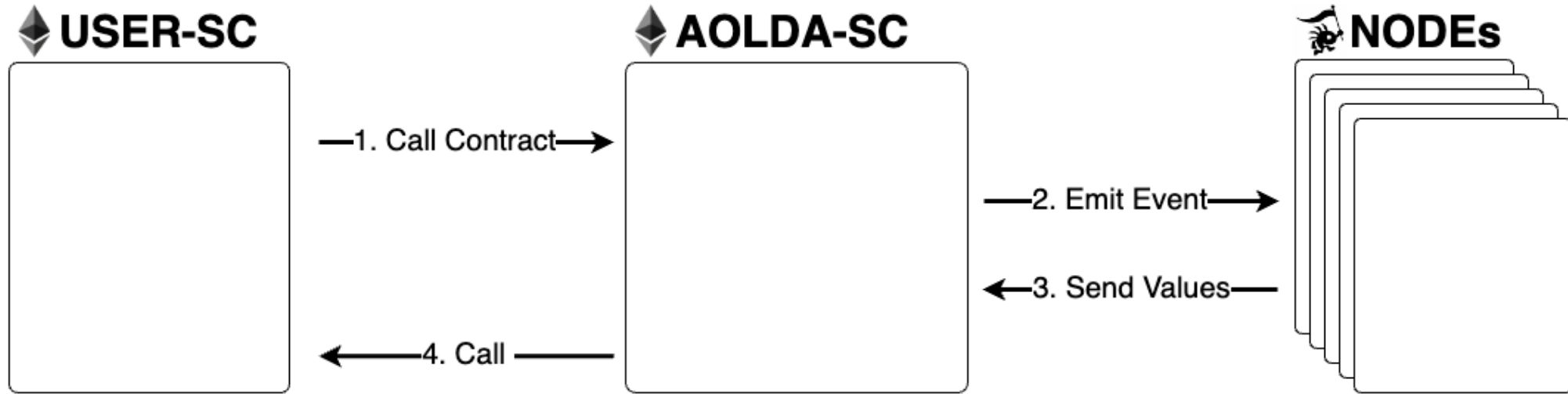
대중적인 언어를 이용해 작성한 컨트랙트를 EVM환경에서  
호출할 수 있는 솔루션을 고안



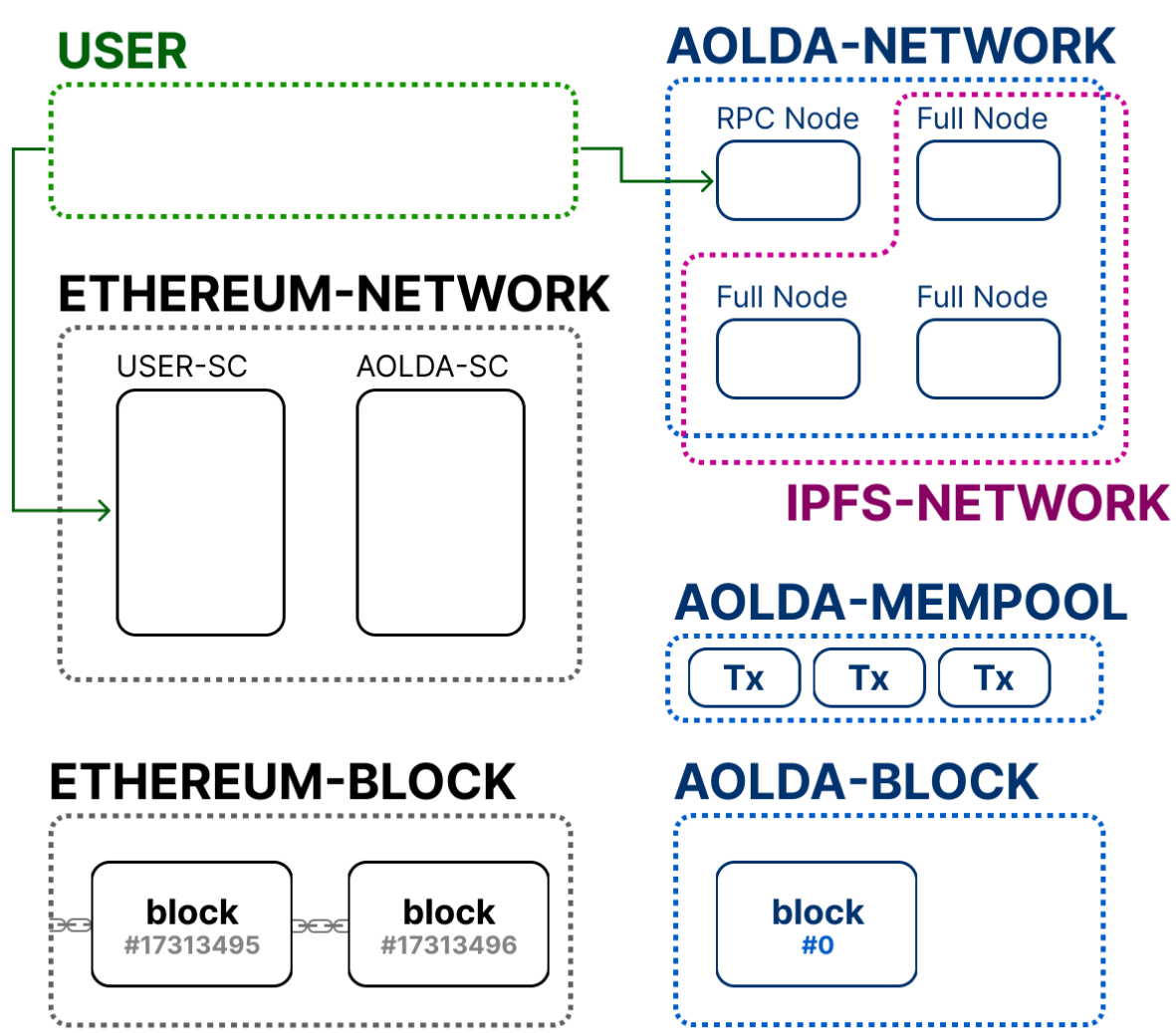
'아올다'는 '어우러지다. 합치다.'는 뜻을 가진 순우리말입니다.

우리는 EVM과 다른 VM들을 연결합니다.

# FlexiContract의 WorkFlow



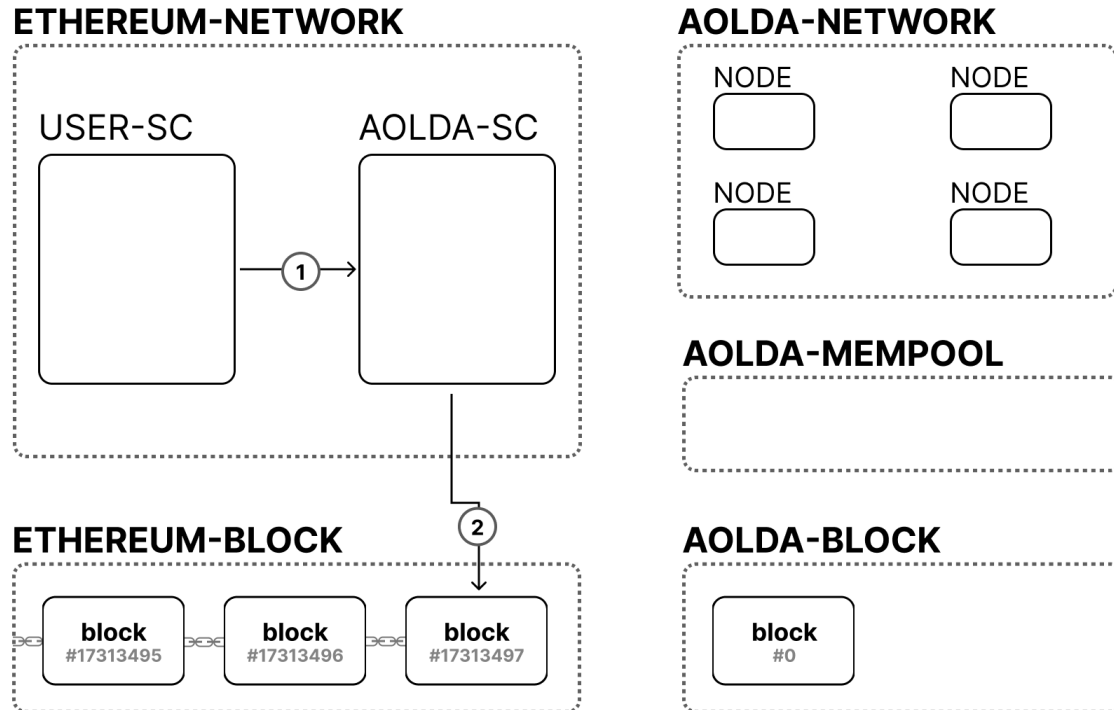
# FlexiContract



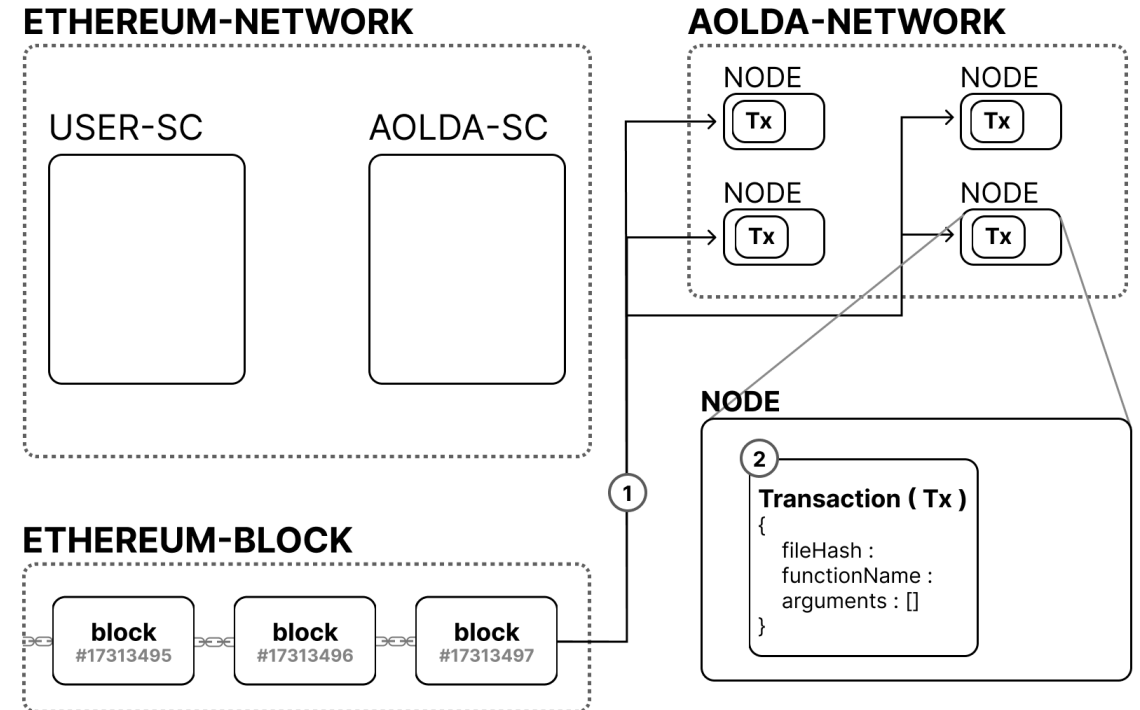
우리는 solidity 외의 언어로 작성된 이 컨트랙트를 **FlexiContract**라고 부르기로 하였습니다. 누구나 쉽게 작성할 수 있는 **FlexiContract** 는 블록체인의 대중화에 크게 기여할 수 있을 것입니다.

# FlexiContract from EVM

## 1. Emit Event



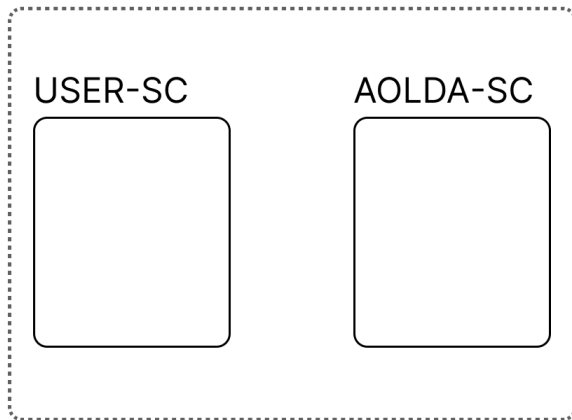
## 2. Listen Event And Make Tx



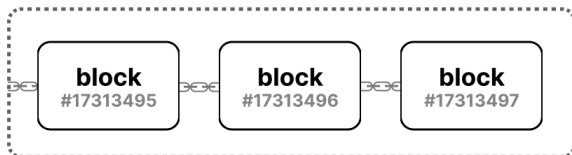
# FlexiContract from EVM

## 3. Broadcast And Push to Mempool

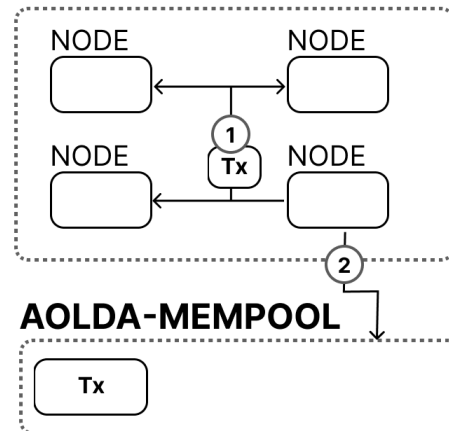
### ETHEREUM-NETWORK



### ETHEREUM-BLOCK



### AOLDA-NETWORK



### AOLDA-MEMPOOL



### AOLDA-BLOCK

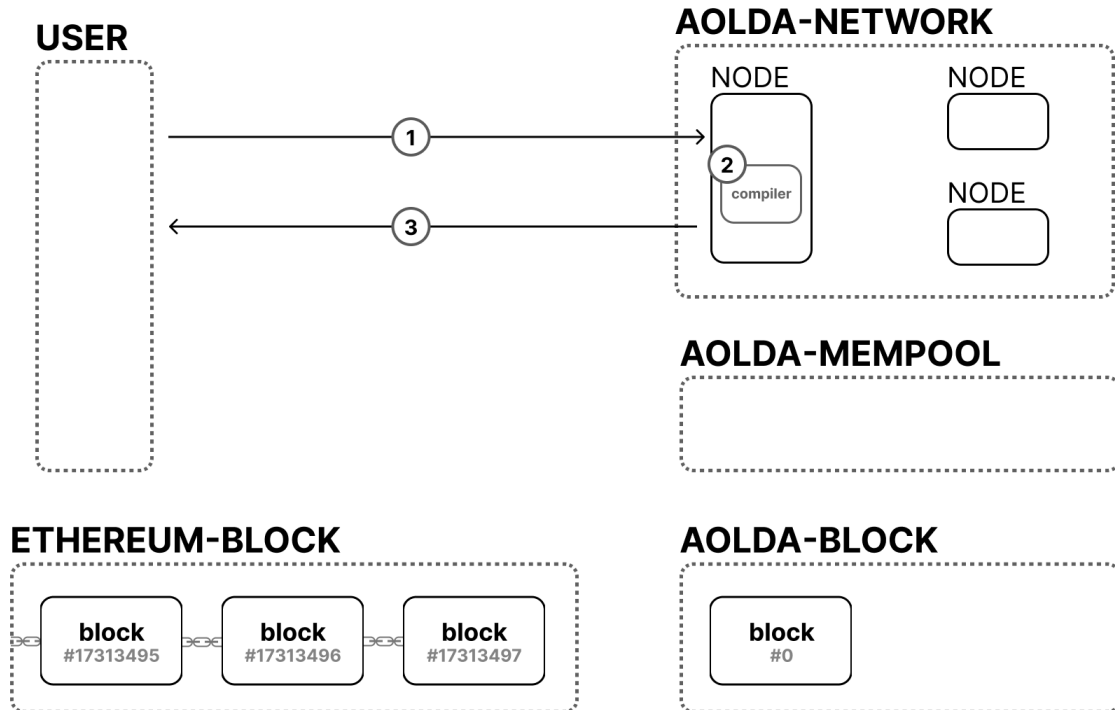


## 4. Create Block

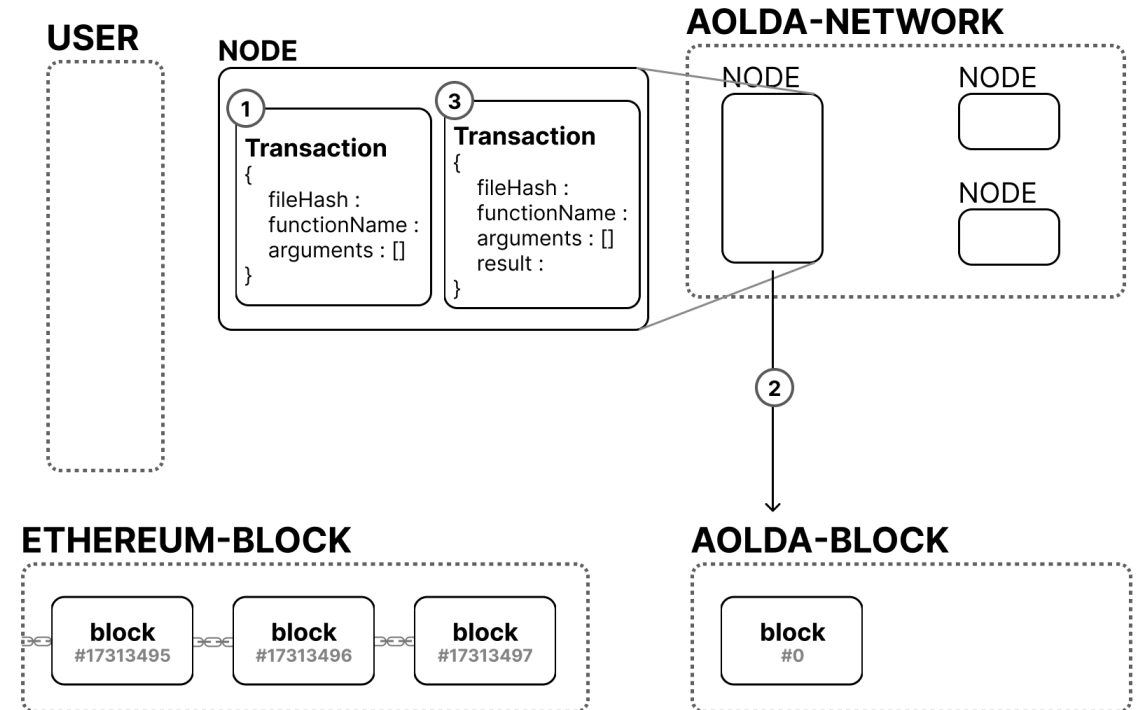
이전 블록이 생성된 후 충분한 시간이 지나면  
Node는 Mempool에서 트랜잭션을 추출하여  
새로운 블록을 생성합니다.

# FlexiContract from API

## 1. Return Value



## 2. Make Tx

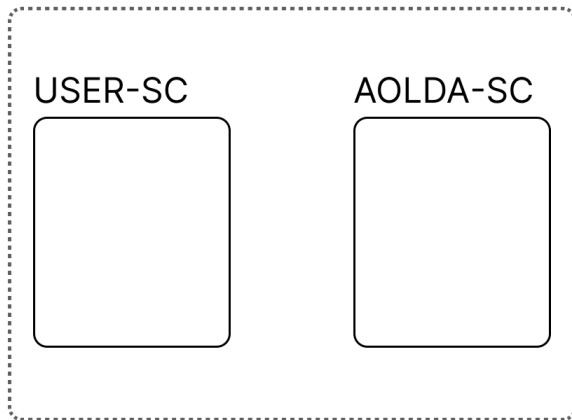




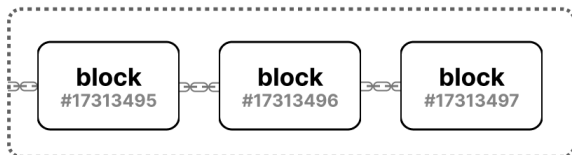
# FlexiContract from API

## 3. Broadcast And Push to Mempool

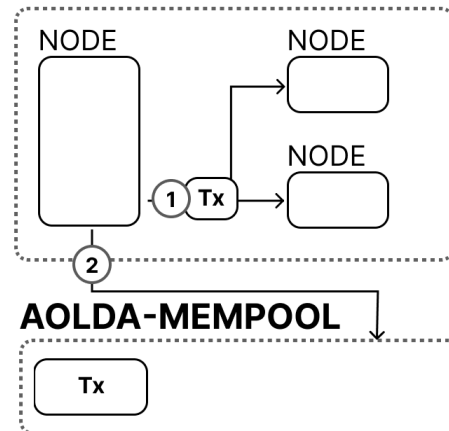
### ETHEREUM-NETWORK



### ETHEREUM-BLOCK



### AOLDA-NETWORK



### AOLDA-MEMPOOL



### AOLDA-BLOCK

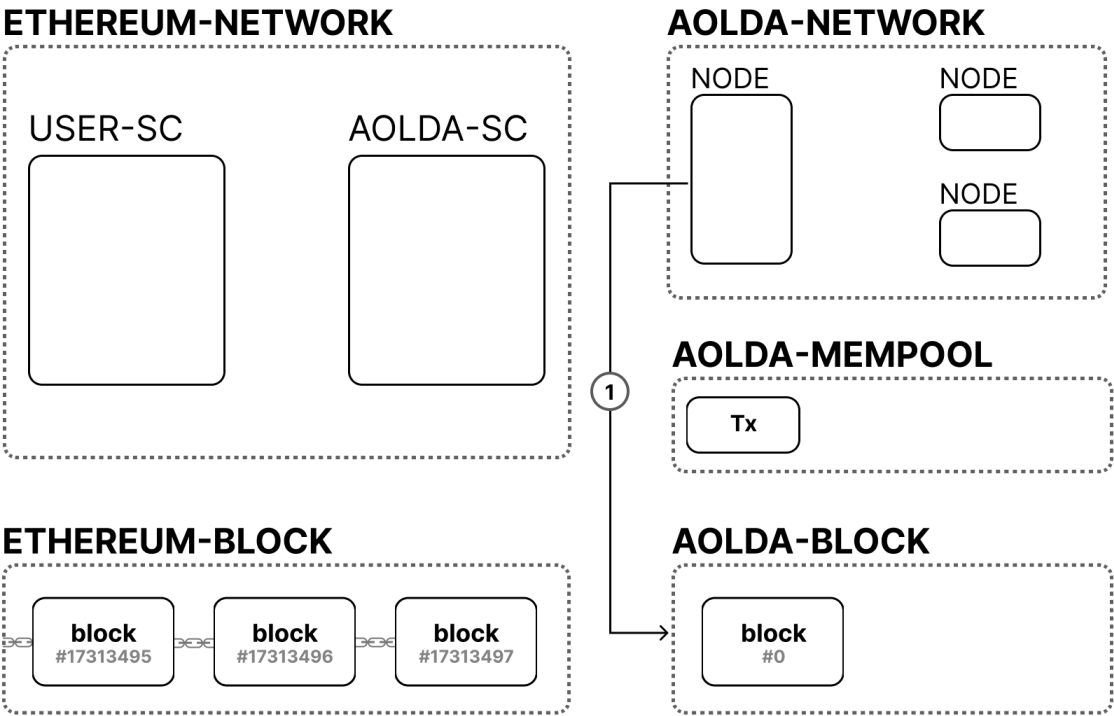


## 4. Create Block

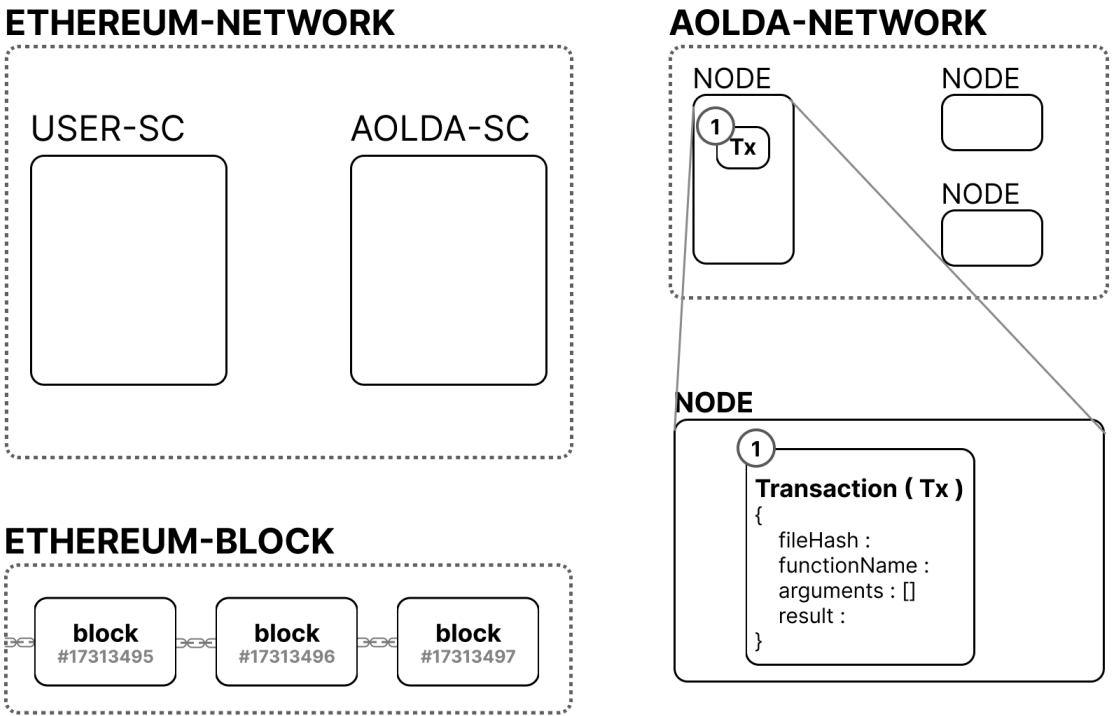
이전 블록이 생성된 후 충분한 시간이 지나면  
Node는 Mempool에서 트랜잭션을 추출하여  
새로운 블록을 생성합니다.

# Confirm Value

## 1. FindTx From Block



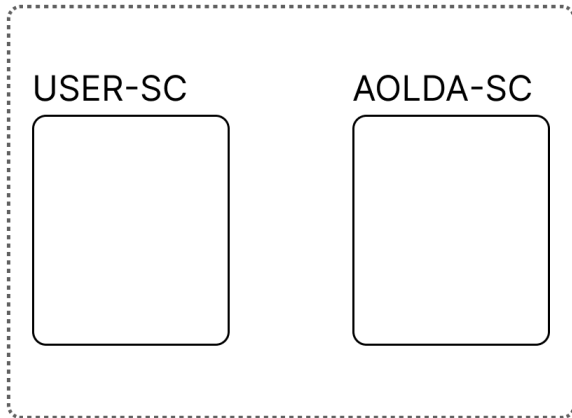
## 2. Make Tx



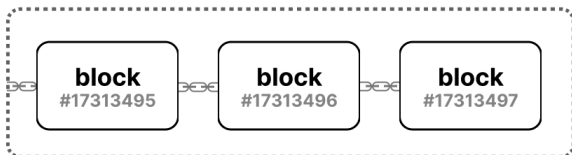
# Confirm Value

## 3. Broadcast And Push to Mempool

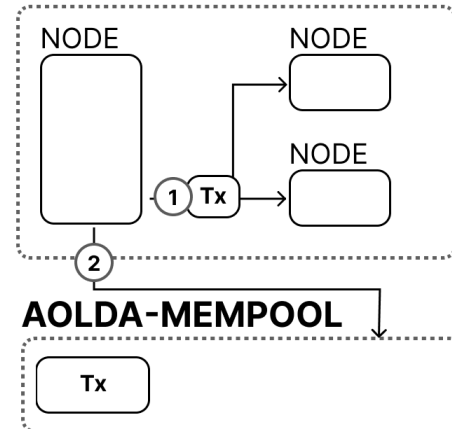
### ETHEREUM-NETWORK



### ETHEREUM-BLOCK



### AOLDA-NETWORK



### AOLDA-BLOCK

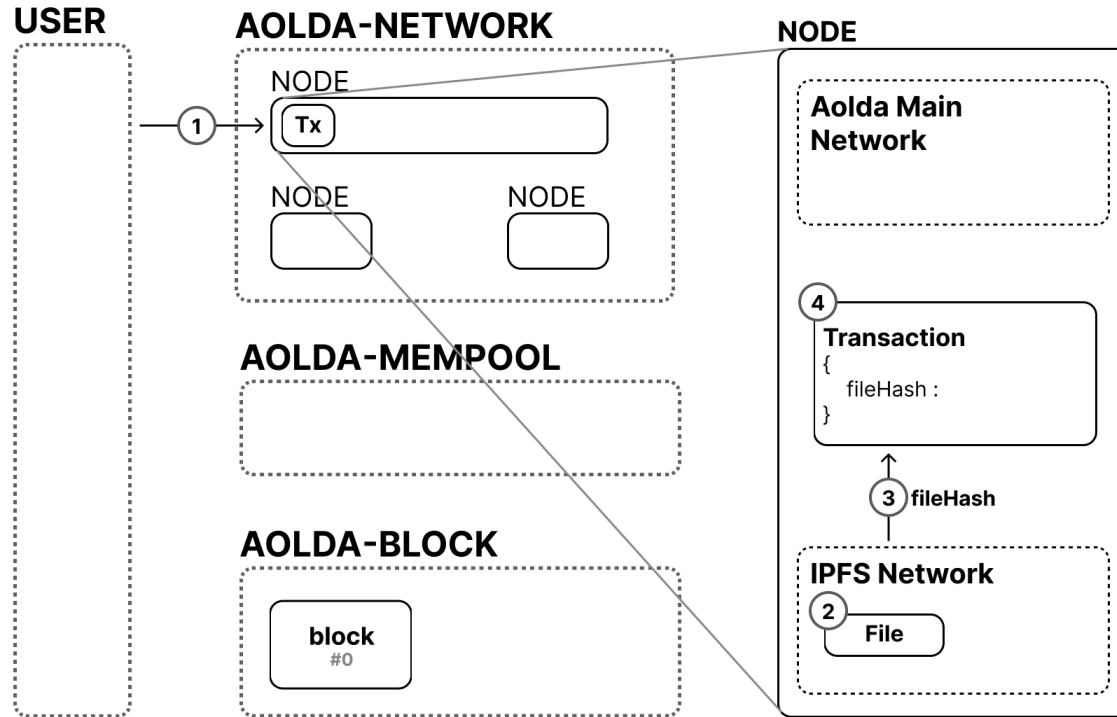


## 4. Create Block

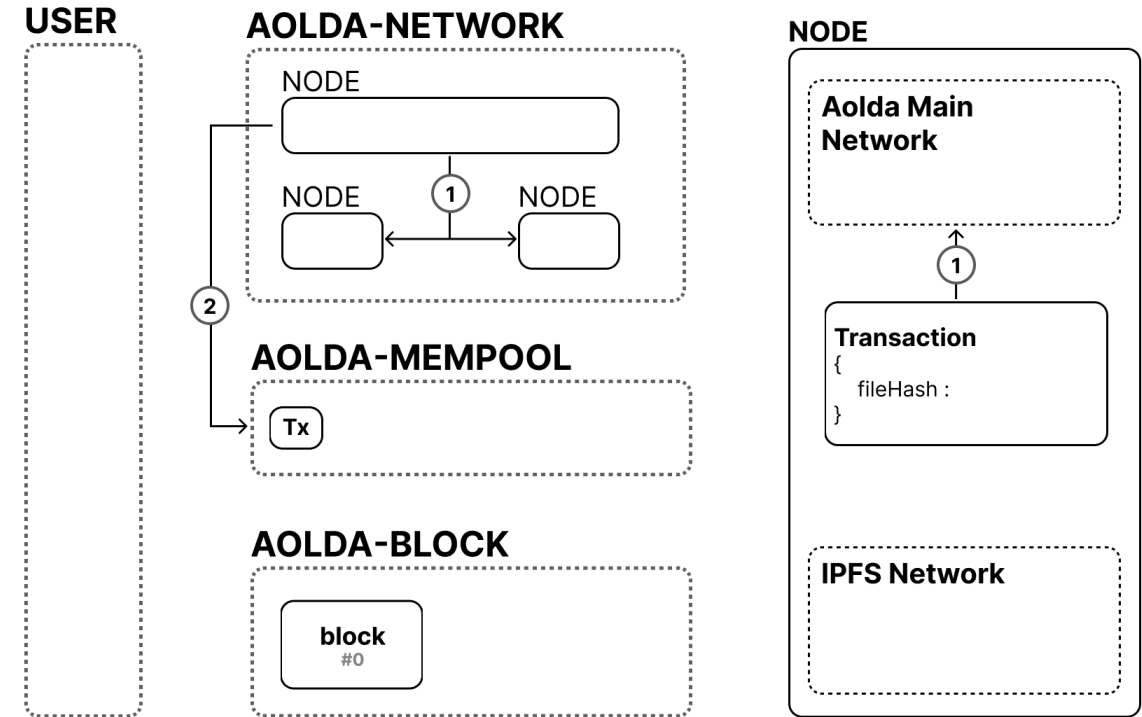
이전 블록이 생성된 후 충분한 시간이 지나면  
Node는 Mempool에서 트랜잭션을 추출하여  
새로운 블록을 생성합니다.

# Add File

## 1. Upload to IPFS And Make Tx



## 2. Broadcast And Push to Mempool

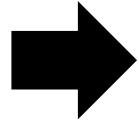


## 3. Create Block

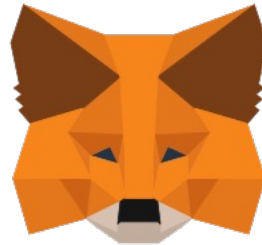
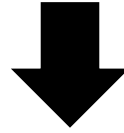
# Tokenomics



토큰

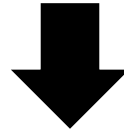


ERC20 기반의 아올토큰을 블록 채굴자에게 보상



User 지갑

AMM 방식으로 시장의  
수요에 따라 가격을 책정하여  
환율 책정



1. Ethereum으로 환전

2. 현물(ex. 기프티콘)로 교환