

블록체인 포팅 메뉴얼

1. Spring Boot Web3j 라이브러리 추가

- build.gradle에 'org.web3j:core:5.0.0' 추가

```
implementation 'org.web3j:core:5.0.0'
```

2. Infura 계정 생성

- <https://infura.io/register> 에서 새로운 계정 생성

Register | Infura

infura.io/register

INFURA

You're an amazing dev

Bring your ideas to the blockchain with just one line of code

We power the most successful organizations

Metamask, Uniswap, Compound, Brave, Zapper, others

Create an account

EMAIL*

Type your email

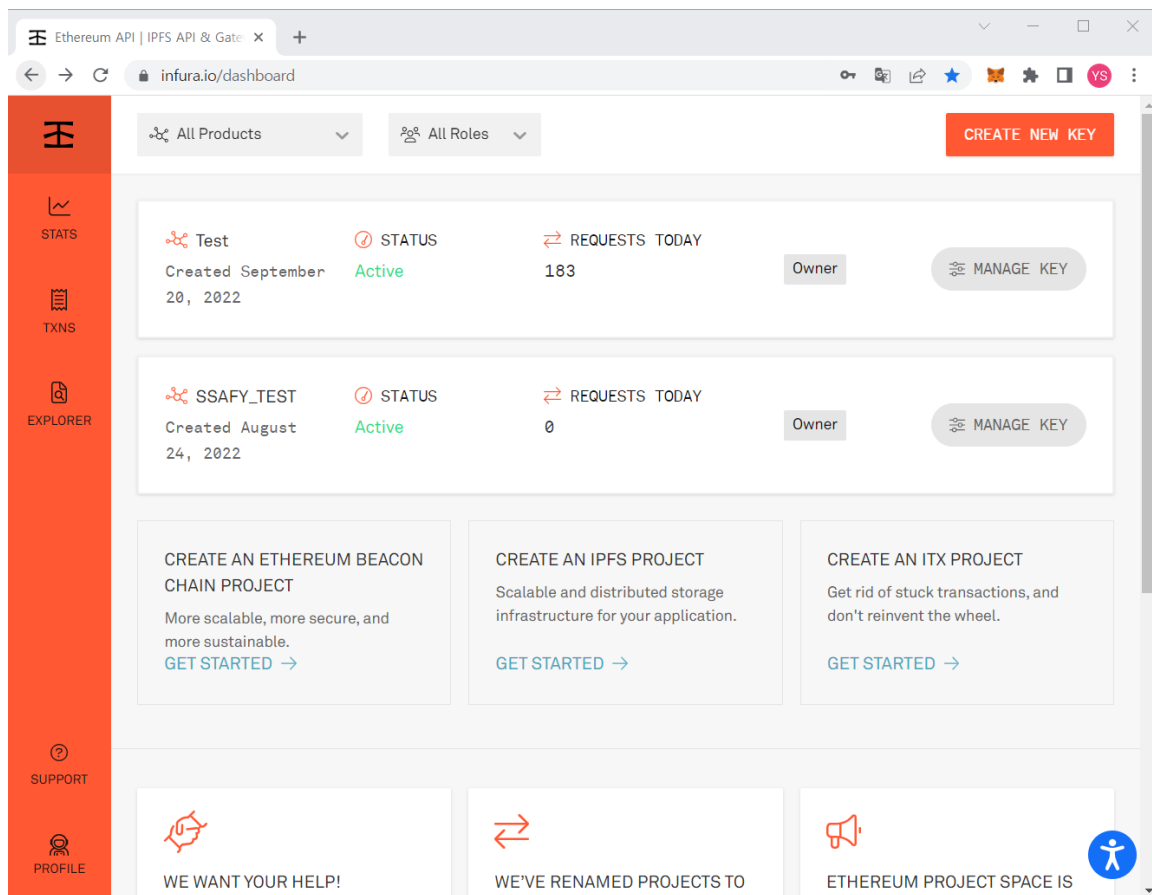
PASSWORD*

By signing up, you confirm you have read and agree to ConsenSys' [Terms of Use](#).

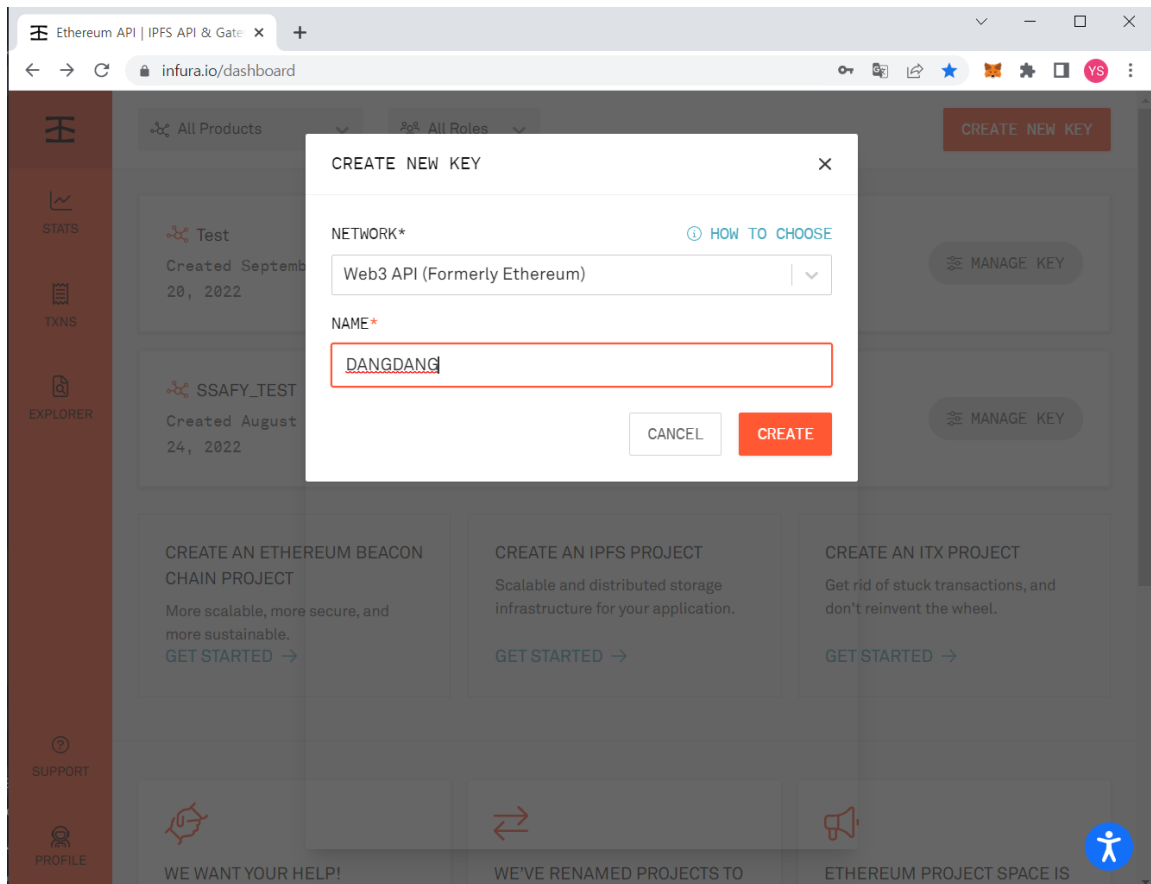
CREATE A FREE ACCOUNT

Already have login and password? [Log In](#) →

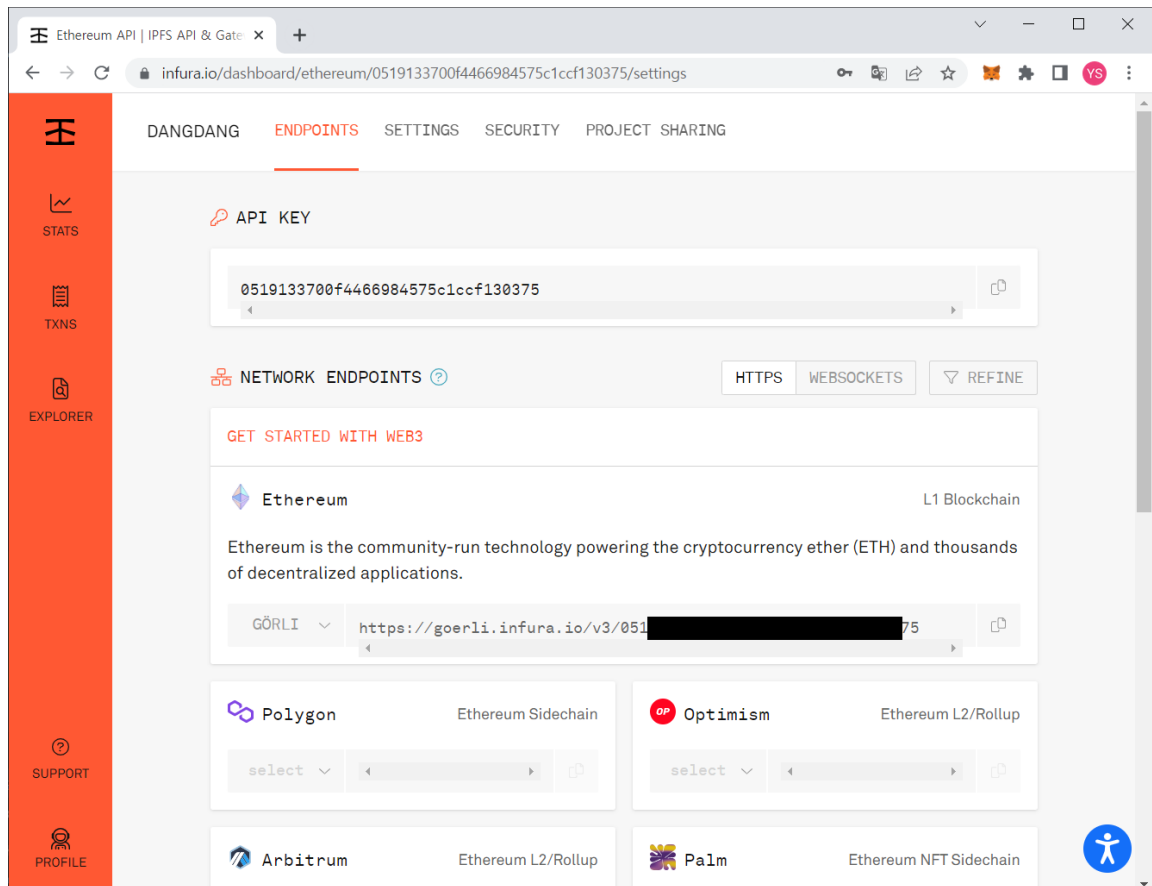
- 생성한 계정으로 로그인 후 CREAT NEW KEY 클릭



- 키 정보 입력



- 생성한 KEY의 ENDPOINTS 탭에서 NETWORK ENDPOINTS - Ethereum 을 GORLI로 변경 후 URL 복사



3. 블록체인 노드 연결

- 블록체인에 접근할 Java 클래스에서 Infura API Key를 url로 사용하는 ADMIN 객체 생성

```
@Service 14 usages
public class EthereumService {

    private final static String URL = "https://goerli.infura.io/v3/bf3b9c7878494afe9a5b37dd08f7a24a"; 3 usages
    public final static Admin ADMIN = Admin.build(new HttpService(URL)); 10 usages
}
```

- ADMIN 객체를 사용하여 블록체인에 트랜잭션 발생

```

public int getWonBalance(String address) { 3 usages
    System.out.println("----- [201]-----");
    try {
        EthGetBalance balanceWei = ADMIN.ethGetBalance(address, DefaultBlockParameterName.LATEST).send();
        return changeWeiToWon(balanceWei.getBalance().toString());
    } catch (IOException e) {
        throw new RuntimeException(e);
    }
}

```