

Subsquid indexing framework

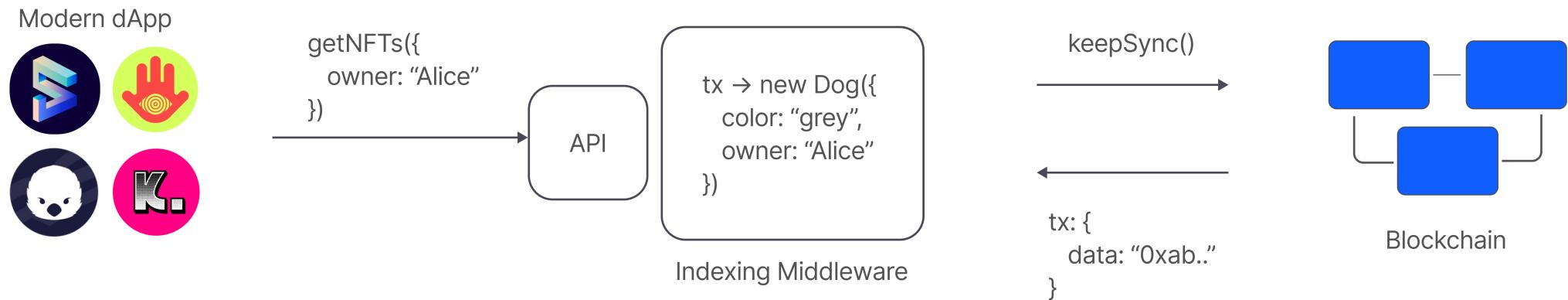
On Fantom network



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Indexing middleware



Ingest on-chain data

Data processing framework

Subsquid ❤️ Fantom

Fantom

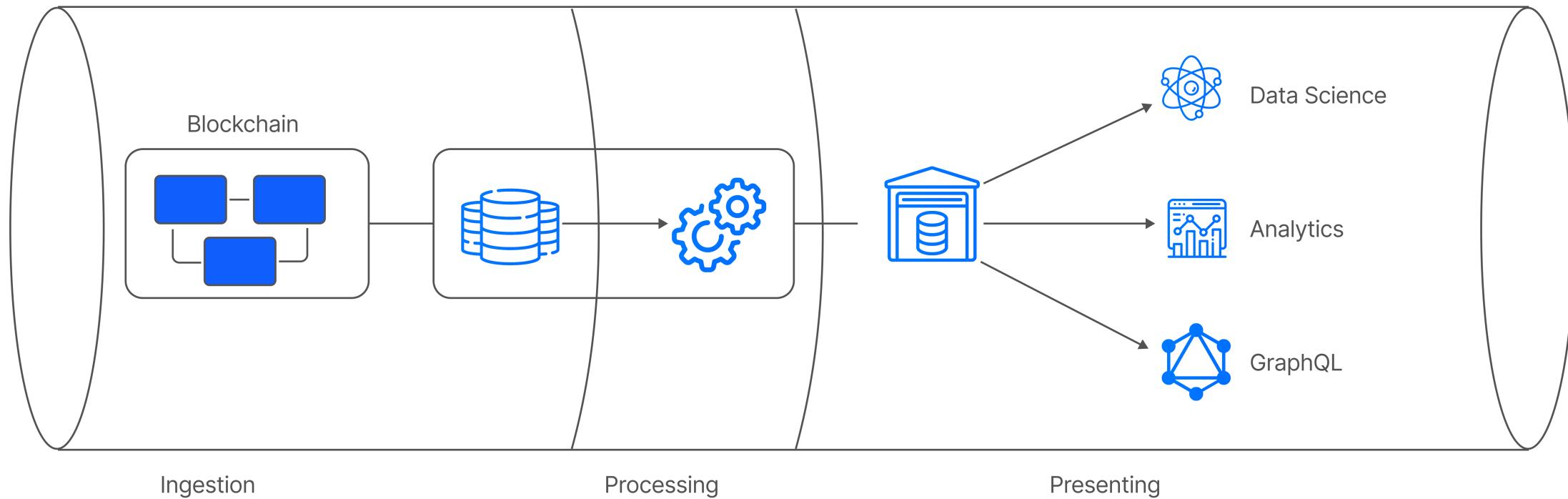
Fast and cheap transactions

Interoperability

Developers incentive system

Why/How

Modular Architecture



Monolith

Multiple uses, same ingestion

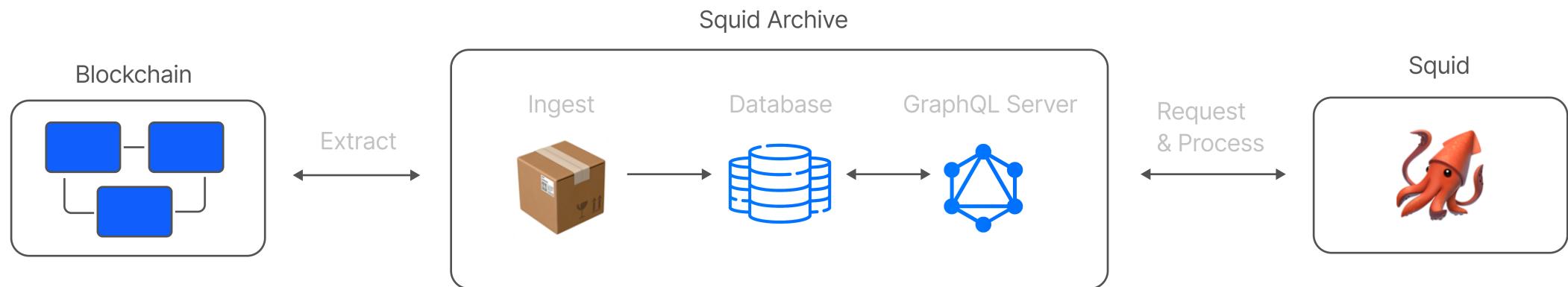
Potential replication

Wasted effort, resources

Modular

Shared extraction services: Archives

Data flow



Archives benefits

One less thing to care about

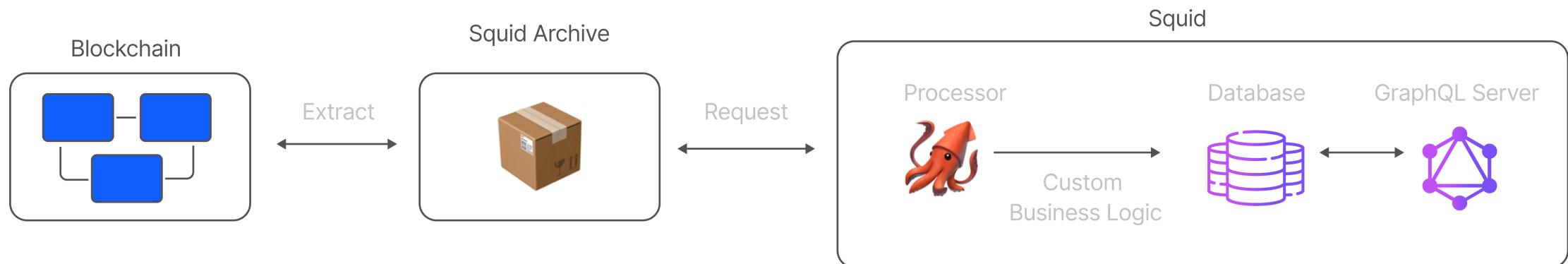
Better storage, better performance

Filtering, batching

Reduce network overhead

Modularity → future improvements

squids



Subsquid SDK benefits

Automated model generation

Automated ABI ➔ code

Code (TypeScript), not config

Strong typings/type safety

Aquarium hosted service

From schema...

```
type Owner @entity {  
    id: ID!  
    ownedTokens: [Token!]! @derivedFrom(field: "owner")  
    balance: BigInt  
}
```

...To Models

```
@Entity_()
export class Owner {
    constructor(props?: Partial<Owner>) {
        Object.assign(this, props)
    }

    @PrimaryColumn_()
    id!: string

    @OneToMany(() => Token, e => e.owner)
    ownedTokens!: Token[]

    @Column_("numeric", {transformer: marshal.bigintTransformer, nullable: true})
    balance!: bigint | undefined | null
}
```

From ABI...

```
[  
  // ...  
  {  
    "inputs": [  
      { "internalType": "address", "name": "to", "type": "address" },  
      { "internalType": "uint256", "name": "tokenId", "type": "uint256" }  
    ],  
    "name": "approve",  
    "outputs": [],  
    "stateMutability": "nonpayable",  
    "type": "function"  
  },  
  // ...  
]
```

...to TypeScript

```
export const functions = {
  // ...
  approve: new Func<[to: string, tokenId: ethers.BigNumber], {to: string, tokenId: ethers.BigNumber}, []>(
    abi, '0x095ea7b3'
  ),
  // ...
}

const { _name } = functions.approve.decode(transaction.input);
```

Aquarium hosting service

```
npm i -g @subsquid/cli@latest  
sqd deploy .
```

Visit app.subsquid.io

Resources

Docs docs.subsquid.io

GitHub github.com/subsquid/

Discord discord.gg/subsquid

Telegram t.me/HydraDevs

Medium medium.com/subsquid