

한 번에 끝내는 블록체인 개발 A to Z

Chapter 3































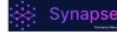





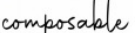



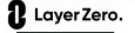






이종 블록체인간 연결하기

Chapter 3

이종 블록체인간 연결하기

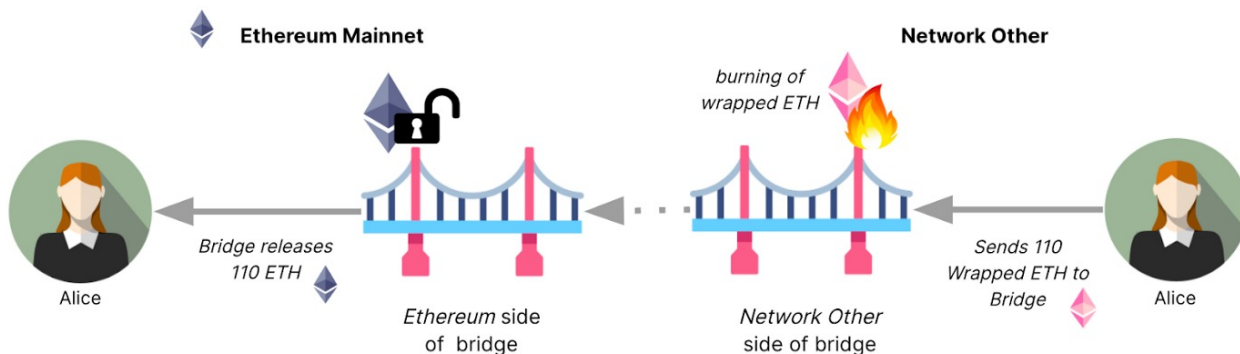
Bridge 구조 (1)

Bridge 종류

| Asset-specific | Chain-specific | Application-specific | Generalized |
|--|--|--|--|
|  (AR)  INTERLAY(BTC)  (B T C)  WBTC  WRAPPED  1kx  @dberenzon |  Avalanche  BINANCE  GRAVITY BRIDGE  Harmony  (PoS Bridge)  ETH-NEAR  Rainbow Bridge  Ronin  secret network  (SnowBridge)  Terra Shuttle  TokenBridge  WORMHOLE  WRAP  (XCMP) |  ANY SWAP  Biconomy  CELER  CHAINFLIP  Gateway  liquidity  Qredo  Ren  Synapse  THORCHAIN  wanchain |  AXELAR  Chainlink  ChainSafe  composable  connectx  deBridge  IBC  LayerZero  Mavr  OPTICS  Polymer  PolyNetwork  rbit  router |

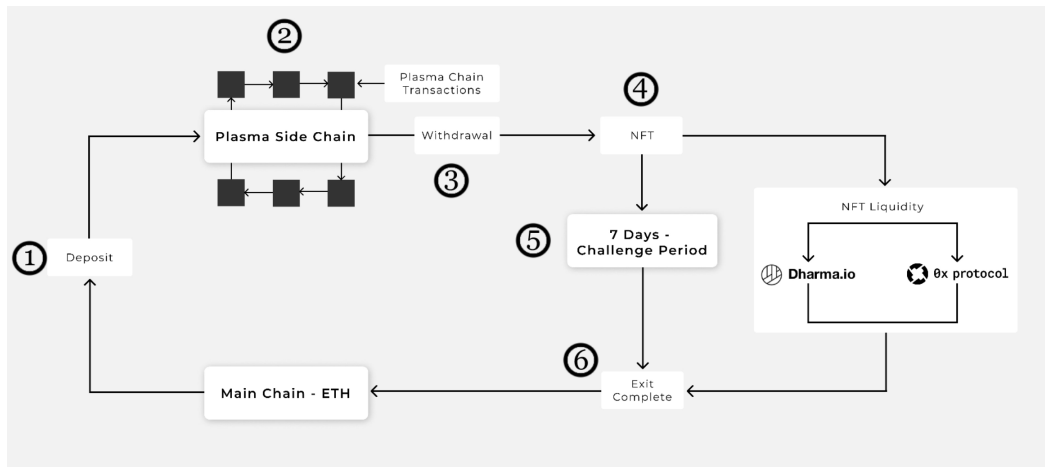
Bridge 종류

- Asset-specific
 - 특정 자산을 다른 체인과 공유하기 위한 목적의 bridge
 - Wrapped 형태를 주로 사용 (fully-collateralized)
 - wBTC, wETH 등
 - 코인이 다른 체인으로 넘어갔을 때 코인의 특징을 살리기 위한 기능 개발 필요



Bridge 종류

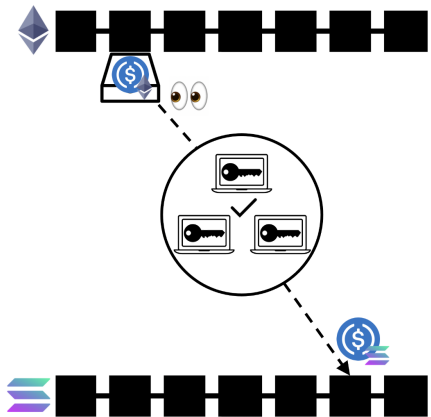
- Chain-specific
 - bridge로 연결된 두 체인이 토큰에 대한 lock & unlock 기능 제공
 - 연결하는 두 체인이 모두 기능을 제공해야 함



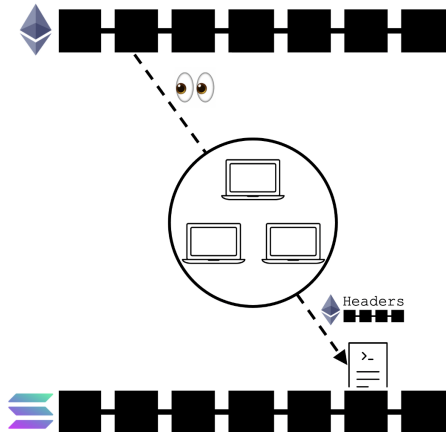
Bridge 종류

- Application-specific
 - 특정 Application 내에서만 여러 블록체인에 연결
 - Adapter 모듈 등을 활용
 - 해당 기능을 다른 application에서 활용하기 어려움
- Generalized
 - Blockchain 프로젝트들을 단일 디자인으로 통일
 - ex) Cosmos IBC Message

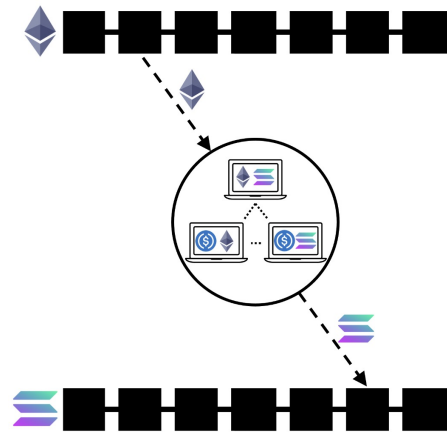
Bridge 디자인



External validators & Federation



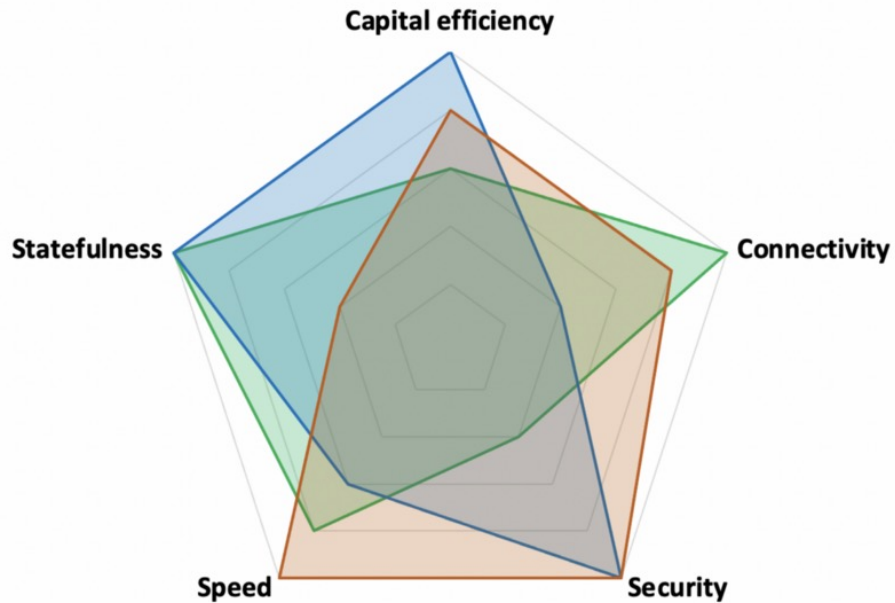
Light client & Relay



Liquidity network

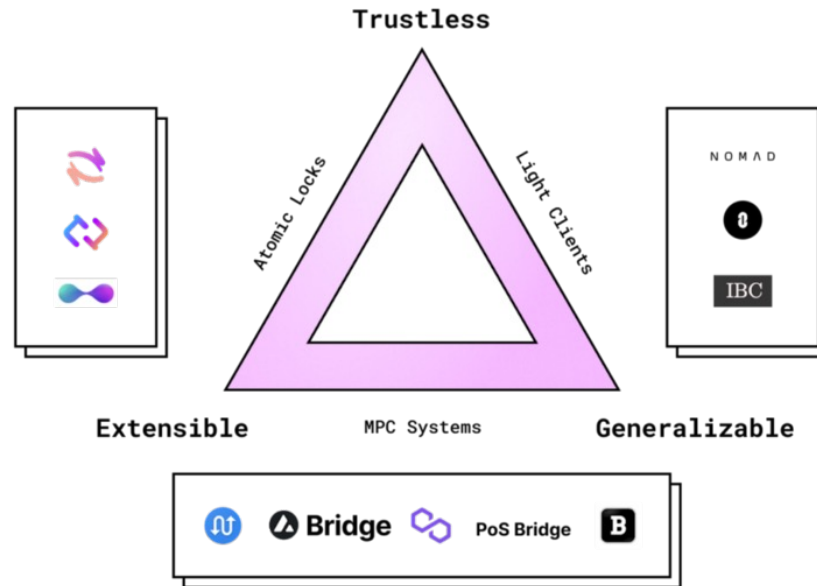
Bridge 디자인

External Validators & Federations Light Clients & Relays Liquidity Networks



Trilemma

- Interoperability Trilemma



Trilemma

- Bridge Trilemma

