

Hi, all! We are from [Orbiter Finance](#), we are building a decentralized cross rollup bridge.

Vitalik had proposed a [Easy Decentralized Cross-layer-2 Bridge](#), which described a very concise cross-chain bridge architecture based on rollup environment and largely inspired the design of the orbiter bridge.

The reason why we build a Cross Rollup Bridge not a Cross Chain

Bridge is the same as [Vitalik's points](#).

In our design, we introduce maker as the LP provider of the destination domain, and zk spv based on the rollup mechanism, which can verify the validity of the specified Tx execution time, amount, and the terms of service bound by the maker. Cross-rollup transactions can be realized through these two roles, and the zk spv strictly restricts the behavior of the maker and punishes the evil behavior.

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cross-rollup-flow

2472×2232 247 KB

](<https://ethresear.ch/uploads/default/original/2X/d/dc2eacdaf75eb7854cf60475e7321cdcf096c8b5.png>)

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cross-tx-arbitration

2766×2472 302 KB

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Recently, we released the yellow paper of our bridge, which contains detailed technical explanations. If you want to know more about it, go ahead for it !

github.com

[Orbiter-Finance/papers/blob/main/yellowpaper/yellowpaper.pdf](#)

version <https://git-lfs.github.com/spec/v1> oid

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