Warp Routes

Overview

Developers can use Hyperlane to permissionlessly deploy Warp Routes - contracts that allow any ERC20, ERC721, or native tokens to move effortlessly between chains.

You can combine Warp Routes with a Hyperlane deployment to create economic trade routes between any chain and others already connected through Hyperlane.

Modular Security

Like all applications built on top of Hyperlane, Warp Routes have customizable security vianterchain Security Modules. This allows Warp Route deployers to configure and enforce custom rules and constraints that the interchain token must follow.

Deploy a Warp Route

Warp Routes can be deployed between any set of chains that have Hyperlane deployments. If you would like to create a Warp Route that includes a chain that Hyperlane is not currently deployed on, feel free todeploy hyperlane yourself!

Warp Route Architecture

Warp Route contracts transfer value between chains by locking collateral tokens on the origin chain (aka the collateral chain) and then minting wrapped tokens on the destination chain (the synthetic chain).

The diagram below provides a simplified outline of the process for creating your Warp Route, and the resulting asset.

Each Warp Route consists of one contract deployed on every chain that the token can move between. These contracts use the <u>Mailbox</u> to send interchain messages to one another.

When a user transfers from thecanonical origin chain to anon-canonical destination chain, their tokens are locked in a HypERC20Collateral contract, which sends a message to the destination chain to mint wrapped tokens.

When a user transfers between non-canonical chains, their wrapped tokens are burned on the origin chain, which sends a message to the destination chain to mint wrapped tokens.

Finally, if a user transfers from a non-canonical origin chain back to the canonical destination chain, their wrapped tokens are burned on the origin chain, which sends a message to the destination chain to release the tokens locked in theHypERC20Collateral contract. Edit this page Previous How to Troubleshoot Your Hyperlane DeploymentNext Warp Route Interface