

Dapp Developer Overview

If you're a developer looking to build on OP Mainnet, you've come to the right place. In this area of the Optimism Docs you'll find everything you need to know about building OP Mainnet applications.

Getting Started

If you're brand new to OP Mainnet, try starting with the guide on [deploying a basic contract](#). It'll get you familiar with the basic steps required to get a contract deployed to the network. OP Mainnet is [EVM equivalent \(opens in a new tab\)](#) so you can feel confident that your existing Ethereum smart contract skills will carry over to OP Mainnet. Just make sure to be aware of the few small [differences between Ethereum and OP Mainnet](#).

You might also want to check out the [testing on OP Networks guide](#) and the tutorial on [running a local development environment](#) to help you feel totally confident in your OP Mainnet deployment.

[Deploying Your First Contract to OP Mainnet](#) [Solidity Compatibility on OP Mainnet](#) [Testing Apps on OP Mainnet](#)

Bridging and Messaging

Looking to build an application that sends ETH, tokens, or data between OP Mainnet and Ethereum? You'll find some useful guides and tutorials in this area of the docs. For instance, if you want to learn how to bridge a token from Ethereum to OP Mainnet (or vice versa!), you should check out the [Standard Token Bridge](#).

If you're looking for something more advanced, take a look at the guide on [sending data between L1 and L2](#). Contracts on one chain can trigger contract functions on the other chain, it's pretty cool! The Standard Token Bridge for OP Mainnet even uses this same message-passing infrastructure under the hood.

[Basics of Bridging on OP Mainnet](#) [Sending Data Between L1 and L2](#) [The Standard Bridge](#)

Tutorials

If you're a bit more familiar with OP Mainnet and Ethereum, you can try walking through one of the tutorials put together by the Optimism community. They'll help you get a head start when building your first Optimistic project.

Tutorial Name	Description	Difficulty Level	Deploying Your First Contract on OP Mainnet Learn how to deploy your first contract to OP Mainnet with Remix and MetaMask.
		Easy	Bridging ETH With the Optimism SDK Learn how to use the Optimism SDK to transfer ETH between Layer 1 (Ethereum or Sepolia) and Layer 2 (OP Mainnet or OP Sepolia).
		Easy	Bridging ERC-20 Tokens With the Optimism SDK Learn how to use the Optimism SDK to transfer ERC-20 tokens between Layer 1 (Ethereum or Sepolia) and Layer 2 (OP Mainnet or OP Sepolia).
		Easy	Bridging your Standard ERC-20 token using the Standard Bridge Learn how to bridge your standard ERC-20 token to layer 2 using the standard bridge.
		Medium	Bridging your Custom ERC-20 token using the Standard Bridge Learn how to bridge your custom ERC-20 token to layer 2 using the standard bridge.
		Medium	Tracing Deposits and Withdrawals With the Optimism SDK Learn how to use the Optimism SDK to trace deposits and withdrawals.
		Easy	Viewing Deposits and Withdrawals by Address With the Optimism SDK Learn how to use the Optimism SDK to view deposits and withdrawals by address.
		Easy	Estimating Transaction Costs With the Optimism SDK Learn how to use the Optimism SDK to estimate the cost of a transaction on OP Mainnet.
		Easy	Sending OP Mainnet Transactions from Ethereum Learn how to send transactions to OP Mainnet from Ethereum.
		Easy	You can also suggest a new tutorial (opens in a new tab) if you have something specific in mind. We'd love to grow this list!

Next Steps

If you still can't find the content you're looking for, there's a few options to get extra help.

- You can [ask a question in the Optimism developer support forum \(opens in a new tab\)](#)
- .
- If you run into any problems during deployment, visit the [Transactions Troubleshooting Guide](#)
- for help.

[Superchain App Quick Start](#) [Deploying Your First Contract on OP Mainnet](#)