



Feb 8, 2023 1 min read

Foundry forge coverage

Updated: Apr 10, 2023

Visual line coverage report with LCOV

LCOV - code coverage report

Current view: top level	Hit	Total	Coverage
Test: lcov.info	Lines:	35	72
Date: 2023-02-04 04:02:36	Functions:	12	23
	Branches:	2	10

Directory	Line Coverage	Functions	Branches
src	<div><div></div></div> 48.6 % 35 / 72	52.2 % 12 / 23	20.0 % 2 / 10

Generated by: [LCOV version 1.16](#)

If you run "forge coverage" in a foundry project, you'll get a table showing how much of your lines and branches are covered.

```
base) → cov git:(main) ✗ forge coverage
.:] Compiling...
.:] Compiling 19 files with 0.8.17
.:] Solc 0.8.17 finished in 1.08s
compiler run successful
analysing contracts...
running tests...
File | % Lines | % Statements | % Branches | % Funcs
-----|-----|-----|-----|-----
script/Counter.s.sol | 0.00% (0/1) | 0.00% (0/1) | 100.00% (0/0) | 0.00% (0/2)
src/Counter.sol | 50.00% (2/4) | 50.00% (2/4) | 0.00% (0/2) | 66.67% (2/3)
Total | 40.00% (2/5) | 40.00% (2/5) | 0.00% (0/2) | 40.00% (2/5)
```

If you want to see visually which lines and branches are or are not covered, use the following steps

Instructions to get line visual coverage in foundry

1. Install genhtml

```
brew install genhtml
```

2. Create a coverage directory in your foundry project

```
mkdir coverage
```

3. Run the following command

```
forge coverage --report lcov && genhtml lcov.info --branch-coverage --output-dir coverage
```

4. Open the following file

```
coverage/index.html
```

And you'll be able to see a coverage report like what you see at the top of the page.

No available formula with the name "genhtml". Did you mean ekhtml?

If you get this error, do

```
brew install ekhtml
```

and it will install genhtml.

Credits

This tutorial was created by Matteo Vendittoli, a student at the RareSkills [blockchain bootcamp](#).

Addendum: Visual line coverage in Visual Studio Code

It is also possible to view line coverage directly inside Visual Studio Code. Credit to [Oxasp_](#) on Twitter for sharing this with us ([original tweet](#)).

1. Install the Coverage Gutters extension in VSCode

2. Generate the coverage report

```
forge coverage --report lcov
```

3. Open the Command Palette

Pick display coverage report