Docker-compose Deployment

For local builds

Please seehttps://github.com/blockscout/blockscout/tree/master/docker-compose for all required information.

Prerequisites

- Docker v20.10+
- Docker-compose 2.x.x+
- Running Ethereum JSON RPC client
-

Building Docker containers from source

```

Copy cd./docker-compose docker-composeup--build

```

Note : you can usedocker compose instead ofdocker-compose , if compose v2 plugin is installed in Docker. Note : if you don't need to make backend customizations, you can rundocker-compose up in order to launch from pre-build backend Docker image. This will be much faster. This command usesdocker-compose.yml by-default, which builds the backend of the explorer into the Docker image and runs 9 Docker containers:

- Postgres 14.x database, which will be available at port 7432 on the host machine.
- Redis database of the latest version.
- Blockscout backend with api at /api path.
- Nginx proxy to bind backend, frontend and microservices.
- Blockscout explorer at http://localhost.
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and 4 containers for microservices (written in Rust):

- Stats
- service with a separate Postgres 14 DB.
- Sol2UML visualizer
- service.
- Sig-provider
- service.
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Note for Linux users : Linux users who run Blockscout in dockerwith a local node need to run the node onhttp://0.0.0.0/ rather thanhttp://127.0.0.1/

Configs for different Ethereum clients

The repo contains built-in configs for different JSON RPC clients without need to build the image.

JSON RPC Client Docker compose launch command Erigon docker-compose -f erigon.yml up -d Geth (suitable for Reth as well) docker-compose -f geth.yml up -d Geth Clique docker-compose -f geth-clique-consensus.yml up -d Nethermind, OpenEthereum docker-compose -f nethermind up -d Ganache docker-compose -f ganache.yml up -d HardHat network docker-compose -f hardhat-network.yml up -d * Running only explorer without DB:docker-compose -f external-db.yml up -d * . In this case, no db container is created. And it assumes that the DB credentials are provided throughDATABASE_URL * environment variable on the backend container. * Running explorer with external backend:docker-compose -f external-backend.yml up -d * Running explorer with external frontend:docker-compose -f external-frontend.yml up -d * Running all microservices:docker-compose -f microservices.yml up -d *

All of the configs assume the Ethereum JSON RPC is running at http://localhost:8545.

In order to stop launched containers, rundocker-compose -d -f config_file.yml down , replacingconfig_file.yml with the file name of the config which was previously launched.

You can adjust BlockScout environment variables:

- for backend in./envs/common-blockscout.env
- for frontend in./envs/common-frontend.env

- for stats service in./envs/common-stats.env
- for visualizer in./envs/common-visualizer.env
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Descriptions of the ENVs are available

- forbackend
- forfrontend
- .
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Running via Makefile

Prerequisites are the same, as for docker-compose setup.

Start all containers:

```

Copy cd./docker makestart

```

Stop all containers:

```

Copy cd./docker makestop

```

Note : Makefile uses the same .env files since it is running docker-compose services inside.

Last updated3 months ago