Rollup

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What is rollup

- JavaScript module bundler
- compiles small pieces of code into something larger and more complex, such as a library or application
- Created by Rich Harris in 2015. Harris is also the creator of svelte

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Motivation for rollup

Its main motivation is to provide a way to efficiently bundle code by creating small, optimized packages that can be easily loaded in the browser

Overall, the motivation for using Rollup is to improve the performance and maintainability of your JavaScript applications by generating optimized bundles that are easy to load in the browser.

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Rollup main features

1. **Smaller bundle sizes**: Rollup is designed to generate smaller bundles than other module bundlers by identifying and removing unused code, and optimizing the code that is included.
2. **Faster load times**: Smaller bundle sizes mean faster load times, which can improve the user experience of your application.
3. **Tree-shaking**: Rollup uses a technique called tree-shaking to eliminate dead code that is never used, which further reduces the size of the bundle.
4. **Better debugging**: Rollup generates source maps that allow you to debug your code in the browser, which can be helpful when developing complex applications.
5. **Support for modern** JavaScript features: Rollup has excellent support for modern JavaScript features, such as ES6 modules and async/await, which can make it easier to write and maintain your code.

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Rollup competitors

Mostly webpack \ esbuild

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Who uses rollup

1. **Facebook**: Facebook uses Rollup as part of its React Native framework, which allows developers to build native mobile applications using JavaScript and React.
2. **Spotify**: Spotify uses Rollup as part of its web player, which is built using web technologies like JavaScript, HTML, and CSS.
3. **Mozilla**: Mozilla uses Rollup as part of its WebThings Gateway project, which provides an open platform for controlling smart home devices.
4. **WordPress**: The WordPress community uses Rollup as part of its Gutenberg project, which provides a modern block-based editor for WordPress.
5. **Google**: Google uses Rollup as part of its AMP (Accelerated Mobile Pages) project, which provides a framework for creating fast-loading mobile web pages.

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repository

rollup-playground : Invoke js file with import using the following

- without bundler
- rollup bundler with command line arguments
- rollup bundler with dynamic import
- rollup bundler with rollup.config.js file
- rollup bundler with watch mode

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Config file

I am using [here](#)

"build": "rollup src/main.js -o dist/bundle.js -f cjs "

But you can put these option in a rollup.config.js and it might be easier [here](#)

```js
// rollup.config.js
export default {
    input: 'src/main.js',
    output: {
        file: 'bundle.js',
        format: 'cjs'
    }
};
```

Possible formats

cjs - common js code

esm - es module

….. ??

Check also [What the heck are CJS, AMD, UMD, and ESM in Javascript?](#)

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References

official docs

 Rollup JavaScript Bundler For Beginners - Lightweight & Fast - Mar 2022

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