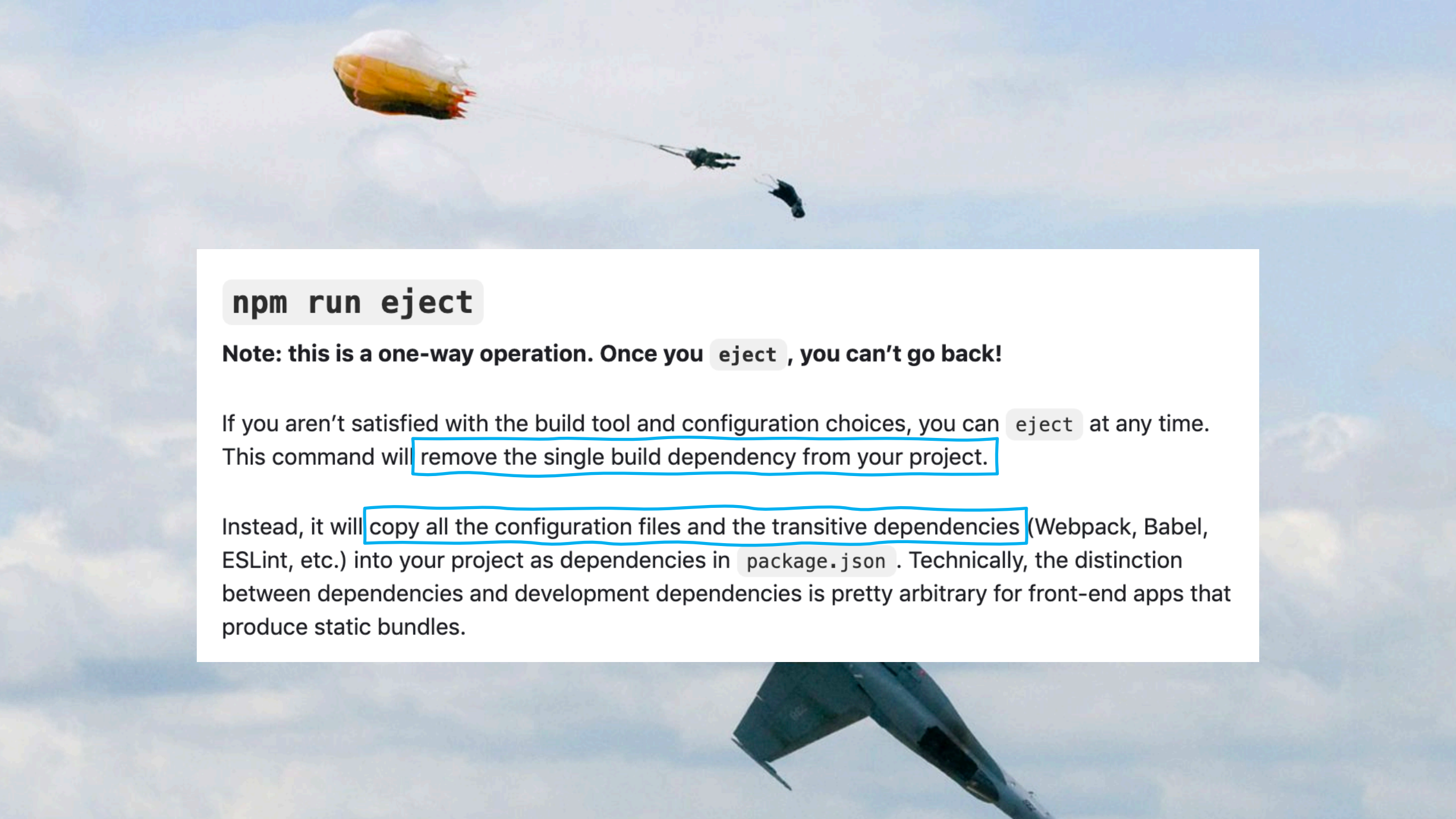
APP (NOT) EJECTED PROPERLY

Gilad Gray

@giladgray

CascadiaJS 2019



`npm run eject`

Note: this is a one-way operation. Once you `eject`, you can't go back!

If you aren't satisfied with the build tool and configuration choices, you can `eject` at any time. This command will remove the single build dependency from your project.

Instead, it will copy all the configuration files and the transitive dependencies (Webpack, Babel, ESLint, etc.) into your project as dependencies in `package.json`. Technically, the distinction between dependencies and development dependencies is pretty arbitrary for front-end apps that produce static bundles.

```
➜ lightning-talk git:(master) yarn eject
yarn run v1.16.0
$ react-scripts eject
NOTE: Create React App 2+ supports TypeScript, Sass, CSS Modules and more without ejecting:
 https://reactjs.org/blog/2018/10/01/create-react-app-v2.html

? Are you sure you want to eject? This action is permanent. Yes
Ejecting...

Copying files into /Users/giladgray/code/cascadiajs2019/lightning-talk
  Adding /config/env.js to the project
  Adding /config/modules.js to the project
  Adding /config/paths.js to the project
  Adding /config/pnpTs.js to the project
  Adding /config/webpack.config.js to the project
  Adding /config/webpackDevServer.config.js to the project
  Adding /config/jest/cssTransform.js to the project
  Adding /config/jest/fileTransform.js to the project
  Adding /scripts/build.js to the project
  Adding /scripts/start.js to the project
  Adding /scripts/test.js to the project
```

Copy files

```
Updating the dependencies
  Removing react-scripts from dependencies
  Adding @babel/core to dependencies
  Adding @svgr/webpack to dependencies
  Adding @typescript-eslint/eslint-plugin to dependencies
  Adding @typescript-eslint/parser to dependencies
  Adding babel-eslint to dependencies
  Adding babel-jest to dependencies
  Adding babel-loader to dependencies
  Adding babel-plugin-named-asset-import to dependencies
  Adding babel-preset-react-app to dependencies
  Adding camelcase to dependencies
  Adding case-sensitive-paths-webpack-plugin to dependencies
  Adding css-loader to dependencies
  Adding dotenv to dependencies
  Adding dotenv-expand to dependencies
  Adding eslint to dependencies
  Adding eslint-config-react-app to dependencies
  Adding eslint-loader to dependencies
  Adding eslint-plugin-flowtype to dependencies
  Adding eslint-plugin-import to dependencies
  Adding eslint-plugin-jsx-a11y to dependencies
  Adding eslint-plugin-react to dependencies
  Adding eslint-plugin-react-hooks to dependencies
  Adding file-loader to dependencies
  Adding fs-extra to dependencies
  Adding html-webpack-plugin to dependencies
  Adding identity-obj-proxy to dependencies
  Adding is-wsl to dependencies
  Adding jest to dependencies
  Adding jest-environment-jsdom-fourteen to dependencies
```

Dependencies

```
  Adding jest-environment-jsdom-fourteen to dependencies
  Adding jest-resolve to dependencies
  Adding jest-watch-typeahead to dependencies
  Adding mini-css-extract-plugin to dependencies
  Adding optimize-css-assets-webpack-plugin to dependencies
  Adding pnp-webpack-plugin to dependencies
  Adding postcss-flexbugs-fixes to dependencies
  Adding postcss-loader to dependencies
  Adding postcss-normalize to dependencies
  Adding postcss-preset-env to dependencies
  Adding postcss-safe-parser to dependencies
  Adding react-app-polyfill to dependencies
  Adding react-dev-utils to dependencies
  Adding resolve to dependencies
  Adding resolve-url-loader to dependencies
  Adding sass-loader to dependencies
  Adding semver to dependencies
  Adding style-loader to dependencies
  Adding terser-webpack-plugin to dependencies
  Adding ts-pnp to dependencies
  Adding url-loader to dependencies
  Adding webpack to dependencies
  Adding webpack-dev-server to dependencies
  Adding webpack-manifest-plugin to dependencies
  Adding workbox-webpack-plugin to dependencies

Updating the scripts
  Replacing "react-scripts start" with "node scripts/start.js"
  Replacing "react-scripts build" with "node scripts/build.js"
  Replacing "react-scripts test" with "node scripts/test.js"
```

Update scripts

```
Configuring package.json
  Adding Jest configuration
  Adding Babel preset
```

Package.json

```
Running yarn...
[1/4] 🔍  Resolving packages...
[2/4] 🚚  Fetching packages...
[3/4] 🔗  Linking dependencies...
warning "@typescript-eslint/eslint-plugin > tsutils@3.17.1" has unmet peer dependency "type
script@>=2.8.0 || >= 3.2.0-dev || >= 3.3.0-dev || >= 3.4.0-dev || >= 3.5.0-dev || >= 3.6.0-
dev || >= 3.6.0-beta || >= 3.7.0-dev || >= 3.7.0-beta".
[4/4] 🔨  Building fresh packages...
success Saved lockfile.
Ejected successfully!

Staged ejected files for commit.
Please consider sharing why you ejected in this survey:
  http://goo.gl/forms/Bi6CZjk1EqsdelXk1

✨  Done in 48.65s.
```

Ready to roll

Jest

Webpack

- config
  - jest
    - cssTransform.js
    - fileTransform.js
  - env.js
  - modules.js
  - paths.js
  - pnpTs.js
  - webpack.config.js
  - webpackDevServer.config.js
- node_modules
- public
- scripts
  - build.js
  - start.js
  - test.js

Jest

`scripts/test` runs `jest` with watching enabled.

Config lives in `package.json`: code coverage, jsdom, test file patterns, plugins.

```
"transform": {
  "^.+\\.(js|jsx|ts|tsx)$": "<rootDir>/node_modules/babel-jest",
  "^.+\\.css$": "<rootDir>/config/jest/cssTransform.js",
  "^(?!.*\\.(js|jsx|ts|tsx|css|json)$)": "<rootDir>/config/jest/fileTransform.js"
},
```

// This is a custom Jest transformer turning style imports into empty objects.

// This is a custom Jest transformer turning file imports into filenames.

Webpack

`scripts/build` => `webpack` production build.

`scripts/start` => `webpack-dev-server` for development.

`webpackDevServer.config.js`

- standard wds config for hot reload, https, proxy.
- custom middleware for that error overlay
- custom middleware to reset service worker during development

`webpack.config.js`

- an engineering marvel

webpack.config.js

680 lines of pure magic

- Always enabled
❖ Production only
❑ Development only

imports

getStyleLoaders()
- style-loader
- css-loader
- postcss-loader
- Preprocessor(

Optimization
❖ OptimizeCSSAssetsPlugin
❖ TerserPlugin

Loaders
- Eslint
- Babel
- Sass
- CSS modules
- file-loader

Plugins
- HtmlWebpackPlugin
❖ InlineChunkHtmlPlugin
- InterpolateHtmlPlugin
- ModuleNotFoundPlugin
- DefinePlugin
❑ HotModuleReplacementPlugin
❑ CaseSensitivePathsPlugin
❑ WatchMissingNodeModulesPlug
❖ MiniCssExtractPlugin
- ManifestPlugin
❖ WorkboxWebpackPlugin
- ForkTsCheckerWebpackPlugin

- config
  - jest
    - cssTransform.js
    - fileTransform.js
  - env.js
  - modules.js
  - paths.js
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- custom jest transformers:
  - turn style imports into empty objects
  - turn file imports into filenames
- load environment variables
- baseUrl logic, aliases, etc.
- paths to various project files
- plug'n'play typescript support
  - (these are used in config and scripts)
- Runs webpack in production mode
- Launches webpack-dev-server
- Runs jest in watch mode

Thank you!

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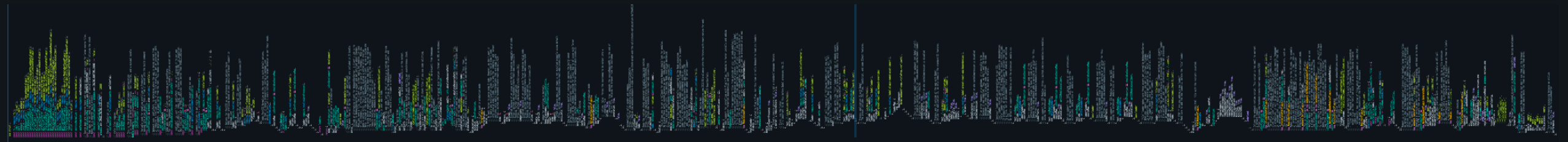
https://github.com/giladgray/ejected-react-app