

```
{  
  
  "compilerOptions": {  
  
    "lib": [  
  
      "es2019",  
      "es2020.promise",  
      "es2020.bigint",  
      "es2020.string"  
    ],  
    "module": "commonjs",  
  
    "target": "es2019",  
  
    "strict": true,  
    "esModuleInterop": true,  
    "skipLibCheck": true,  
  }  
}
```

- ◀ Specifies which libraries or polyfills should be included in build
E.g, including `es2020.promise` will enable build code to work on older browsers with no build in promise spec
- ◀ Specifies how to transform code when files refer to each other with `require` or `import`
- ◀ Specifies output code format
- ◀ **Prevents compilation on any minor type errors or style inconsistencies**

0.02.45

0.00.56

Common tsconfig Bases

A collection of bases is maintained by the TypeScript project.



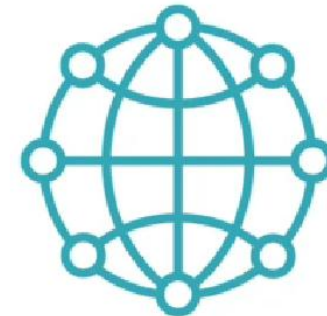
recommended

Enforces strict style and
targets ES2015



create react app

Settings needs for jsx
interoperability



node

Outputs modern server
JavaScript require,
async, etc.

Multi- and Single-file Compilation

Multi-file Compilation

Creates one JavaScript file for every target TypeScript file

Each file must be loaded for the application to work in a browser

Files must be concatenated or use require to work in Node.js

Possible to update just one generated file in production

Standard compilation option for TypeScript

Single-file Compilation

Combines all TypeScript files into one single JavaScript file

Only a single file must be loaded for the application to work in a browser

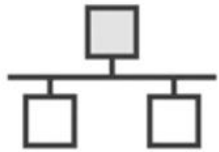
Single file will work when invoked as a Node script

Updated production code must be pushed in its entirety

Additional tooling (Webpack, Babel) needed



Single-file Compilation for Majority of Tasks



Greater support for isomorphic applications



Fewer HTTP requests, simpler deployment to web applications



Greater consistency across browser / Node versions

Compiling a TypeScript application to a single file generally makes it easier to deploy as both a web and a server-side application.