

# 코드 스플리팅 번들사이즈 줄이기

## 이슈

```
pnpm --filter counsel build:dev
> counsel@0.0.0 build:dev /Users/kobe/Workspace/planner-webview-ep-copy/apps/counsel
> tsc -b && vite build --mode dev

vite v6.1.0 building for dev...
✓ 1273 modules transformed.
dist/index.html                                0.47 kB | gzip: 0.35 kB
dist/assets/fa-v4compatibility-BJH4VnwU.woff2  4.58 kB
dist/assets/fa-v4compatibility-TpJZPDyn.ttf     10.14 kB
dist/assets/fa-brands-400-By5PU7E5.woff2     108.33 kB
dist/assets/fa-brands-400-C9o1QdEV.ttf        188.16 kB
dist/assets/fa-solid-900-CZInPWNh.woff2       318.04 kB
dist/assets/fa-regular-400-B-k0w3cK.woff2     391.72 kB
dist/assets/fa-light-300-B_KFKM0T.woff2      427.60 kB
dist/assets/fa-duotone-900-BBjFX7ei.woff2     431.85 kB
dist/assets/fa-thin-100-Chgqqaiv.woff2        467.11 kB
dist/assets/fa-solid-900-B54fgDhd.ttf         886.74 kB
dist/assets/fa-regular-400-CkDxSLrG.ttf        982.41 kB
dist/assets/fa-light-300-eWQW9tvF.ttf         1,106.45 kB
dist/assets/fa-thin-100-BTm78kkg.ttf          1,221.98 kB
dist/assets/fa-duotone-900-DFYDJMC9.ttf       1,241.07 kB
dist/assets/Bootstrap-CdbwzBID.css            2.02 kB | gzip: 0.88 kB
dist/assets/__federation_expose_AppApp-CpaLSOCD.css 573.65 kB | gzip: 111.09 kB
dist/assets/__federation_shared_react-BvdwsIwx.js  0.09 kB | gzip: 0.10 kB
dist/assets/__federation_shared_react-dom-BwmskdT2.js 0.13 kB | gzip: 0.12 kB
dist/assets/Bootstrap-DaiYoRKN.js            0.49 kB | gzip: 0.32 kB
dist/assets/preload-helper-CLcXU_4U.js        0.99 kB | gzip: 0.60 kB
dist/assets/index--9Nq836h.js                 1.21 kB | gzip: 0.64 kB
dist/assets/remoteEntry.js                    1.28 kB | gzip: 0.72 kB
dist/assets/refresh-feature-flags-DNdhZTj1.js  4.49 kB | gzip: 1.78 kB
dist/assets/profiler-DsDCHXx-.js              4.74 kB | gzip: 2.19 kB
dist/assets/__federation_fn_import-DNA4nQ9n.js  5.09 kB | gzip: 2.03 kB
dist/assets/index-BVKZFYvx.js                  6.90 kB | gzip: 2.76 kB
dist/assets/push-manager-factory-CsW-UXVh.js   8.05 kB | gzip: 2.89 kB
dist/assets/startRecording-B9PDQHPs.js        19.34 kB | gzip: 7.56 kB
dist/assets/index-0sXqqFyt.js                  134.20 kB | gzip: 43.17 kB
dist/assets/__federation_shared_react-router-dom-nr3XJPel.js 152.43 kB | gzip: 50.22 kB
dist/assets/__federation_expose_AppApp-DeQt32zZ.js 827.55 kB | gzip: 266.47 kB

(!) Some chunks are larger than 500 kB after minification. Consider:
- Using dynamic import() to code-split the application
- Use build.rollupOptions.output.manualChunks to improve chunking: https://rollupjs.org/configuration-options/#output-manualchunks
- Adjust chunk size limit for this warning via build.chunkSizeWarningLimit.
✓ built in 4.56s
```

- 빌드 결과물의 파일 크기가 500kb가 넘을 경우 절대적인 기준은 아니지만, 성능 경고가 발생하는 임계점으로 여겨짐
- vite는 내부적으로 rollup을 사용하는데 기본적으로 `chunkSizeWarningLimit` 이 500kb 임.

## rollup-plugin-visualizer

```
// vite.config.ts
import { visualizer } from "rollup-plugin-visualizer";
```

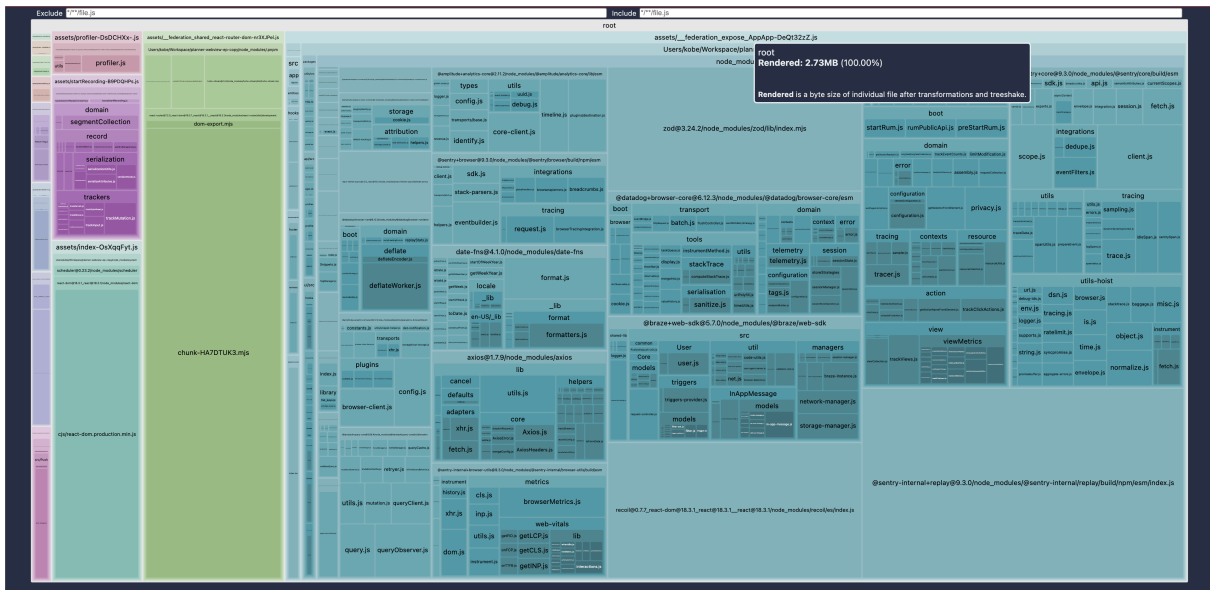
```

export default defineConfig({
  plugins: [
    // ...중략
    visualizer({ open: true })
  ],
  build: {
    modulePreload: true,
    target: 'esnext',
    minify: true,
    cssCodeSplit: true,
  },
});

```

```
$ pnpm --filter counsel build:dev
```

vite 설정과 빌드를 하면 브라우저에 해당 프로젝트에서 차지하는 파일의 용량 및 의존성 있는 라이브러리들의 용량을 확인해볼 수 있게 시각화된 결과물을 보여준다.



현재 문제가 되는 부분이 `__federation_expose_AppApp-DeQt32zZ.js` 파일인데 `datadog`, `braze`, `sentry` 등이 다 함께 해당파일에 번들링 되어 있다.

## 👉 해결

`manualChunks` 옵션을 통해서 **lazy loading** 하지 않고 chunk로 나누고 초기 로딩에 영향을 안 줌.

```
// vite.config.ts
// ... 중략
build: {
  modulePreload: true,
  target: 'esnext',
  minify: true,
  cssCodeSplit: true,
  // 추가
  rollupOptions: {
    output: {
      manualChunks(id) {
        if (id.includes('node_modules')) {
          if (id.includes('@sentry')) return 'vendor-sentry';
          if (id.includes('@datadog')) return 'vendor-datadog';
          if (id.includes('@braze')) return 'vendor-braze';
        }
      }
    },
  },
},
```

```

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dist/assets/fa-v4compatibility-TpJZPDyn.ttf   10.14 kB
dist/assets/fa-brands-400-By5PU7E5.woff2     108.33 kB
dist/assets/fa-brands-400-C9o1QdEV.ttf       188.16 kB
dist/assets/fa-solid-900-CZInPWNh.woff2     318.04 kB
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dist/assets/fa-light-300-B_KFKM0T.woff2     427.60 kB
dist/assets/fa-duotone-900-BBjFX7ei.woff2    431.85 kB
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dist/assets/fa-solid-900-BS4fgDhd.ttf       886.74 kB
dist/assets/fa-regular-400-CkDxsLrG.ttf     982.41 kB
dist/assets/fa-light-300-eWQW9tvF.ttf      1,106.45 kB
dist/assets/fa-thin-100-BTm78kkg.ttf       1,221.98 kB
dist/assets/fa-duotone-900-DFYDJMC9.ttf    1,241.07 kB
dist/assets/Bootstrap-CdbwzBID.css          2.02 kB | gzip: 0.88 kB
dist/assets/__federation_expose_AppApp-CpaLSOCD.css 573.65 kB | gzip: 111.09 kB
dist/assets/__federation_shared_react-BC8ZSvb5.js 0.13 kB | gzip: 0.13 kB
dist/assets/__federation_shared_react-dom-D40YgmKm.js 0.13 kB | gzip: 0.13 kB
dist/assets/__federation_fn_import-D9rGNMel.js 0.14 kB | gzip: 0.12 kB
dist/assets/Bootstrap-KZzMjole.js          0.47 kB | gzip: 0.31 kB
dist/assets/index-BBLanxgS.js              1.23 kB | gzip: 0.66 kB
dist/assets/remoteEntry.js                 1.28 kB | gzip: 0.72 kB
dist/assets/index-yBjzXJbu.js              6.79 kB | gzip: 2.72 kB
dist/assets/vendor-braze-DNeGDpoL.js      108.44 kB | gzip: 35.84 kB
dist/assets/index-6eiY804S.js              134.20 kB | gzip: 43.17 kB
dist/assets/__federation_shared_react-router-dom-Cp59Dw0A.js 152.41 kB | gzip: 50.21 kB
dist/assets/vendor-datadog-Dfh2QwX1.js    169.72 kB | gzip: 59.37 kB
dist/assets/vendor-sentry-BqvQvXA0.js     240.84 kB | gzip: 79.82 kB
dist/assets/__federation_expose_AppApp-B7UBckbU.js 348.93 kB | gzip: 106.67 kB
✓ built in 4.83s

```

- 827.55 kB → 348.93 kB 로 줄어듦고 경고 메세지 사라짐.