



# Import non Javascript assets into ES Modules

This article updates [Importing JSON and CSS on Javascript](#) and corrects some mistakes from the previous post.

In [Importing JSON and CSS on Javascript](#) we discussed the ability to import CSS and JSON directly into Javascript using ESM syntax and [import assertions](#).

It is now possible to import JSON and CSS into a Javascript module to have some level of control over when they are processed.

We import CSS modules like this:

```
import sheet from './styles.css' assert {  
  type: 'css'  
};
```

And then have the option to add them to the document style sheet or to a custom element's shadow root.

```
// Add the stylesheet to the host document  
document.adoptedStyleSheets = [sheet];  
  
// Add the stylesheet to a shadow root  
shadowRoot.adoptedStyleSheets = [sheet];
```

Importing JSON content is done in a similar fashion:

We first import the JSON file with the proper type assertion and then we can then use the imported data in other scripts or templates.

```
import http from 'http';
```

```
import config from './package.json' assert './package.json';

http
  .createServer((req, res) => {
    res.write(`App name: ${config.name}\n`);
    res.write(`App version: ${config.version}`);
    res.end();
  })
  .listen(8080);
```

So why would we want to do this?

CSS and JSON modules have some of the same benefits as JavaScript modules.

- **Deduplication:** The file will only be fetched, instantiated, and parsed once, regardless of how many times it's requested
- **Consistent order of evaluation:** when the importing JavaScript is running, it can rely on the content it imports having already been fetched and parsed
- **Security:** modules are fetched with CORS and use strict MIME-type checking

JSON modules run on both Node.js and browsers (Chrome 91 and later) and CSS modules are supported in browsers (Chrome 93 and later)