# MiniCssExtractPlugin



This plugin extracts CSS into separate files. It creates a CSS file per JS file which contains CSS. It supports On-Demand-Loading of CSS and SourceMaps.

It builds on top of a new webpack v4 feature (module types) and requires webpack 4 to work.

Compared to the extract-text-webpack-plugin:

- Async loading
- No duplicate compilation (performance)
- Easier to use
- Specific to CSS

## Install

npm install --save-dev mini-css-extract-plugin

## Usage

## Configuration

publicPath

Type: String|Function Default: the publicPath in webpackOptions.output

Specifies a custom public path for the target file(s).

#### Minimal example

webpack.config.js

```
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
module.exports = {
  plugins: [
    new MiniCssExtractPlugin({
      // Options similar to the same options in webpackOptions.output
      filename: '[name].css',
      chunkFilename: '[id].css',
      ignoreOrder: false, // Enable to remove warnings about conflicting order
   }),
  ],
  module: {
    rules: [
        test: /\.css$/,
        use: [
            loader: MiniCssExtractPlugin.loader,
            options: {
              // you can specify a publicPath here
              // by default it uses publicPath in webpackOptions.output
              publicPath: '../',
              hmr: process.env.NODE_ENV === 'development',
            },
          },
        ],
      },
    ],
  },
```

#### publicPath function example

```
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
module.exports = {
  plugins: [
    new MiniCssExtractPlugin({
        // Options similar to the same options in webpackOptions.output
        // both options are optional
        filename: '[name].css',
        chunkFilename: '[id].css',
    }),
```

```
],
module: {
  rules: [
      test: /\.css$/,
      use: [
          loader: MiniCssExtractPlugin.loader,
          options: {
            publicPath: (resourcePath, context) => {
              return path.relative(path.dirname(resourcePath), context) + '/';
            },
          },
        },
      ],
    },
  ],
},
```

### Advanced configuration example

This plugin should be used only on production builds without style-loader in the loaders chain, especially if you want to have HMR in development.

Here is an example to have both HMR in development and your styles extracted in a file for production builds.

(Loaders options left out for clarity, adapt accordingly to your needs.)

```
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
const devMode = process.env.NODE_ENV !== 'production';

module.exports = {
  plugins: [
    new MiniCssExtractPlugin({
        // Options similar to the same options in webpackOptions.output
        // both options are optional
        filename: devMode ? '[name].css' : '[name].[hash].css',
        chunkFilename: devMode ? '[id].css' : '[id].[hash].css',
    }),
    ],
}
```

#### **Hot Module Reloading (HMR)**

extract-mini-css-plugin supports hot reloading of actual css files in development. Some options are provided to enable HMR of both standard stylesheets and locally scoped CSS or CSS modules. Below is an example configuration of mini-css for HMR use with CSS modules.

While we attempt to hmr css-modules. It is not easy to perform when code-splitting with custom chunk names. reloadAll is an option that should only be enabled if HMR isn't working correctly. The core challenge with css-modules is that when code-split, the chunk ids can and do end up different compared to the filename.

```
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
module.exports = {
  plugins: [
    new MiniCssExtractPlugin({
        // Options similar to the same options in webpackOptions.output
        // both options are optional
        filename: '[name].css',
        chunkFilename: '[id].css',
     }),
  ],
  module: {
    rules: [
        {
        test: /\.css$/,
        }
}
```

## **Minimizing For Production**

To minify the output, use a plugin like optimize-css-assets-webpack-plugin. Setting optimization.minimizer overrides the defaults provided by webpack, so make sure to also specify a JS minimizer:

```
const TerserJSPlugin = require('terser-webpack-plugin');
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
const OptimizeCSSAssetsPlugin = require('optimize-css-assets-webpack-plugin');
module.exports = {
  optimization: {
    minimizer: [new TerserJSPlugin({}), new OptimizeCSSAssetsPlugin({})],
  },
  plugins: [
    new MiniCssExtractPlugin({
      filename: '[name].css',
      chunkFilename: '[id].css',
    }),
 ],
  module: {
    rules: [
        test: /\.css$/,
        use: [MiniCssExtractPlugin.loader, 'css-loader'],
      },
   ],
  },
};
```

#### **Features**

#### **Using preloaded or inlined CSS**

The runtime code detects already added CSS via link> or <style> tag. This can be useful when injecting CSS on server-side for Server-Side-Rendering. The href of the link> tag has to match the URL that will be used for loading the CSS chunk. The data-href attribute can be used for link> and <style> too. When inlining CSS data-href must be used.

#### **Extracting all CSS in a single file**

Similar to what extract-text-webpack-plugin does, the CSS can be extracted in one CSS file using optimization.splitChunks.cacheGroups.

#### webpack.config.js

```
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
module.exports = {
  optimization: {
    splitChunks: {
      cacheGroups: {
        styles: {
          name: 'styles',
          test: /\.css$/,
          chunks: 'all',
          enforce: true,
        },
      },
    },
  },
  plugins: [
    new MiniCssExtractPlugin({
      filename: '[name].css',
    }),
  ],
  module: {
    rules: [
        test: /\.css$/,
        use: [MiniCssExtractPlugin.loader, 'css-loader'],
      },
    ],
  },
```

#### **Extracting CSS based on entry**

You may also extract the CSS based on the webpack entry name. This is especially useful if you import routes dynamically but want to keep your CSS bundled according to entry. This also prevents the CSS duplication issue one had with the ExtractTextPlugin.

```
const path = require('path');
const MiniCssExtractPlugin = require('mini-css-extract-plugin');
function recursiveIssuer(m) {
  if (m.issuer) {
    return recursiveIssuer(m.issuer);
  } else if (m.name) {
    return m.name;
    return false;
module.exports = {
  entry: {
    foo: path.resolve(__dirname, 'src/foo'),
    bar: path.resolve(__dirname, 'src/bar'),
  },
  optimization: {
    splitChunks: {
      cacheGroups: {
        fooStyles: {
          name: 'foo',
          test: (m, c, entry = 'foo') =>
            m.constructor.name === 'CssModule' && recursiveIssuer(m) === entry,
          chunks: 'all',
          enforce: true,
        },
        barStyles: {
          name: 'bar',
          test: (m, c, entry = 'bar') =>
            m.constructor.name === 'CssModule' && recursiveIssuer(m) === entry,
          chunks: 'all',
          enforce: true,
        },
      },
    },
  },
  plugins: [
    new MiniCssExtractPlugin({
      filename: '[name].css',
    }),
  ],
  module: {
    rules: [
```

```
test: /\.css$/,
    use: [MiniCssExtractPlugin.loader, 'css-loader'],
    },
    ],
    },
};
```

#### **Module Filename Option**

With the moduleFilename option you can use chunk data to customize the filename. This is particularly useful when dealing with multiple entry points and wanting to get more control out of the filename for a given entry point/chunk. In the example below, we'll use moduleFilename to output the generated css into a different directory.

```
const miniCssExtractPlugin = new MiniCssExtractPlugin({
   moduleFilename: ({ name }) => `${name.replace('/js/', '/css/')}.css`,
});
```

#### **Long Term Caching**

For long term caching use filename: "[contenthash].css". Optionally add [name].

### **Remove Order Warnings**

For projects where css ordering has been mitigated through consistent use of scoping or naming conventions, the css order warnings can be disabled by setting the ignoreOrder flag to true for the plugin.

```
new MiniCssExtractPlugin({
   ignoreOrder: true,
}),
```

## **Media Query Plugin**

If you'd like to extract the media queries from the extracted CSS (so mobile users don't need to load desktop or tablet specific CSS anymore) you should use one of the following plugins:

- Media Query Plugin
- Media Query Splitting Plugin

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