

# babel-runtime

[Source code of released version](#) | [Source code of development version](#)

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Meteor maintains a version of the runtime helpers needed by Babel-transpiled code. In most cases, the code is copied from Babel's helper implementations, though we have also made some changes.

Benefits of maintaining our own package include:

- IE 8 support. Babel's helpers target IE 9 and do not work in IE 8, but generally IE 8 support can be achieved with only minor changes.
- Backwards-compatibility. When the Babel compiler changes, the helpers sometimes change. Our Babel package can keep old helpers for back-compat. (If we change over to publishing original ES6 code in packages instead of transpiled code, this becomes less important.)
- Client-side code size. We've made the helpers file as small as possible.

## Helpers

Helpers needed for each transform **as of [Babel v5.6.15](#)**:

- es3.propertyLiterals: None
- es3.memberExpressionLiterals: None
- es6.arrowFunctions: None
- es6.templateLiterals
  - `taggedTemplateLiteralLoose`
- es6.classes
  - `inherits`
  - `classCallCheck`
  - `createClass` (only for getter/setters)
  - Excluded because only for decorator support(2): `createDecoratedClass` , `defineDecoratedPropertyDescriptor`
- es6.constants: None
- es6.blockScoping: None
  - Excluded because only for spec mode(1): `temporalUndefined` , `temporalAssertDefined`
- es6.properties.shorthand: None
- es6.properties.computed: None
  - Excluded because only for non-loose mode(1): `defineProperty`
- es6.parameters: None
- es6.spread
  - `bind` (for `new A(...b)` )
- es6.forOf: None
- es7.objectRestSpread
  - `_extends`
  - Everything in es6.destructuring
- es6.destructuring
  - `objectWithoutProperties`
  - `objectDestructuringEmpty`

- es7.trailingFunctionCommas: None
- flow: None

Footnotes:

1. A transform can be run in "loose," normal, or "spec" mode, with "loose" providing the fastest, most lightweight, and usually most browser-compatible transpilation, while "spec" mode tries extra hard to be spec-compliant at the expense of those things. We've found that "loose" mode is the best mode for production code for every transform we've looked at.
2. Decorators are still a Stage 1 proposal and are only implemented in Babel as an experiment.