

Synopsis

```
npm diff [...<paths>]
```

Description

Similar to its `git diff` counterpart, this command will print diff patches of files for packages published to the npm registry.

- `npm diff --diff=<spec-a> --diff=<spec-b>`

Compares two package versions using their registry specifiers, e.g: `npm diff --diff=pkg@1.0.0 --diff=pkg@^2.0.0`. It's also possible to compare across forks of any package, e.g: `npm diff --diff=pkg@1.0.0 --diff=pkg-fork@1.0.0`.

Any valid spec can be used, so that it's also possible to compare directories or git repositories, e.g: `npm diff --diff=pkg@latest --diff=./packages/pkg`

Here's an example comparing two different versions of a package named `abbrev` from the registry:

```
npm diff --diff=abbrev@1.1.0 --diff=abbrev@1.1.1
```

On success, output looks like:

```
diff --git a/package.json b/package.json
index v1.1.0..v1.1.1 100644
--- a/package.json
+++ b/package.json
@@ -1,6 +1,6 @@
 {
   "name": "abbrev",
-  "version": "1.1.0",
+  "version": "1.1.1",
   "description": "Like ruby's abbrev module, but in js",
   "author": "Isaac Z. Schlueter <i@izs.me>",
   "main": "abbrev.js",
```

Given the flexible nature of npm specs, you can also target local directories or git repos just like when using `npm install`:

```
npm diff --diff=https://github.com/npm/libnpmdiff --diff=./local-path
```

In the example above we can compare the contents from the package installed from the git repo at `github.com/npm/libnpmdiff` with the contents of the `./local-path` that contains a valid package, such as a modified copy of the original.

- `npm diff` (in a package directory, no arguments):

If the package is published to the registry, `npm diff` will fetch the tarball version tagged as `latest` (this value can be configured using the `tag` option) and proceed to compare the contents of files present

in that tarball, with the current files in your local file system.

This workflow provides a handy way for package authors to see what package-tracked files have been changed in comparison with the latest published version of that package.

- `npm diff --diff=<pkg-name>` (in a package directory):

When using a single package name (with no version or tag specifier) as an argument, `npm diff` will work in a similar way to [npm-outdated](#) and reach for the registry to figure out what current published version of the package named `<pkg-name>` will satisfy its dependent declared semver-range. Once that specific version is known `npm diff` will print diff patches comparing the current version of `<pkg-name>` found in the local file system with that specific version returned by the registry.

Given a package named `abbrev` that is currently installed:

```
npm diff --diff=abbrev
```

That will request from the registry its most up to date version and will print a diff output comparing the currently installed version to this newer one if the version numbers are not the same.

- `npm diff --diff=<spec-a>` (in a package directory):

Similar to using only a single package name, it's also possible to declare a full registry specifier version if you wish to compare the local version of an installed package with the specific version/tag/semver-range provided in `<spec-a>`.

An example: assuming `pkg@1.0.0` is installed in the current `node_modules` folder, running:

```
npm diff --diff=pkg@2.0.0
```

It will effectively be an alias to `npm diff --diff=pkg@1.0.0 --diff=pkg@2.0.0`.

- `npm diff --diff=<semver-a> [--diff=<semver-b>]` (in a package directory):

Using `npm diff` along with semver-valid version numbers is a shorthand to compare different versions of the current package.

It needs to be run from a package directory, such that for a package named `pkg` running `npm diff --diff=1.0.0 --diff=1.0.1` is the same as running `npm diff --diff=pkg@1.0.0 --diff=pkg@1.0.1`.

If only a single argument `<version-a>` is provided, then the current local file system is going to be compared against that version.

Here's an example comparing two specific versions (published to the configured registry) of the current project directory:

```
npm diff --diff=1.0.0 --diff=1.1.0
```

Note that tag names are not valid `--diff` argument values, if you wish to compare to a published tag, you must use the `pkg@tagname` syntax.

Filtering files

It's possible to also specify positional arguments using file names or globs pattern matching in order to limit the result of diff patches to only a subset of files for a given package, e.g:

```
npm diff --diff=pkg@2 ./lib/ CHANGELOG.md
```

In the example above the diff output is only going to print contents of files located within the folder `./lib/` and changed lines of code within the `CHANGELOG.md` file.

Configuration

`diff`

- Default:
- Type: String (can be set multiple times)

Define arguments to compare in `npm diff .`

`diff-name-only`

- Default: false
- Type: Boolean

Prints only filenames when using `npm diff .`

`diff-unified`

- Default: 3
- Type: Number

The number of lines of context to print in `npm diff .`

`diff-ignore-all-space`

- Default: false
- Type: Boolean

Ignore whitespace when comparing lines in `npm diff .`

`diff-no-prefix`

- Default: false
- Type: Boolean

Do not show any source or destination prefix in `npm diff` output.

Note: this causes `npm diff` to ignore the `--diff-src-prefix` and `--diff-dst-prefix` configs.

`diff-src-prefix`

- Default: "a/"
- Type: String

Source prefix to be used in `npm diff` output.

`diff-dst-prefix`

- Default: "b/"

- Type: String

Destination prefix to be used in `npm diff` output.

diff-text

- Default: false
- Type: Boolean

Treat all files as text in `npm diff`.

global

- Default: false
- Type: Boolean

Operates in "global" mode, so that packages are installed into the `prefix` folder instead of the current working directory. See [folders](#) for more on the differences in behavior.

- packages are installed into the `{prefix}/lib/node_modules` folder, instead of the current working directory.
- bin files are linked to `{prefix}/bin`
- man pages are linked to `{prefix}/share/man`

tag

- Default: "latest"
- Type: String

If you ask npm to install a package and don't tell it a specific version, then it will install the specified tag.

Also the tag that is added to the package@version specified by the `npm tag` command, if no explicit tag is given.

When used by the `npm diff` command, this is the tag used to fetch the tarball that will be compared with the local files by default.

workspace

- Default:
- Type: String (can be set multiple times)

Enable running a command in the context of the configured workspaces of the current project while filtering by running only the workspaces defined by this configuration option.

Valid values for the `workspace` config are either:

- Workspace names
- Path to a workspace directory
- Path to a parent workspace directory (will result in selecting all workspaces within that folder)

When set for the `npm init` command, this may be set to the folder of a workspace which does not yet exist, to create the folder and set it up as a brand new workspace within the project.

This value is not exported to the environment for child processes.

workspaces

- Default: null
- Type: null or Boolean

Set to true to run the command in the context of **all** configured workspaces.

Explicitly setting this to false will cause commands like `install` to ignore workspaces altogether. When not set explicitly:

- Commands that operate on the `node_modules` tree (install, update, etc.) will link workspaces into the `node_modules` folder. - Commands that do other things (test, exec, publish, etc.) will operate on the root project, *unless* one or more workspaces are specified in the `workspace` config.

This value is not exported to the environment for child processes.

`include-workspace-root`

- Default: false
- Type: Boolean

Include the workspace root when workspaces are enabled for a command.

When false, specifying individual workspaces via the `workspace` config, or all workspaces via the `workspaces` flag, will cause npm to operate only on the specified workspaces, and not on the root project.

See Also

- [npm outdated](#)
- [npm install](#)
- [npm config](#)
- [npm registry](#)