npm-run-script

Synopsis

```
npm run-script <command> [-- <args>]
aliases: run, rum, urn
```

Description

This runs an arbitrary command from a package's "scripts" object. If no "command" is provided, it will list the available scripts.

run[-script] is used by the test, start, restart, and stop commands, but can be called directly, as well. When the scripts in the package are printed out, they're separated into lifecycle (test, start, restart) and directly-run scripts.

Any positional arguments are passed to the specified script. Use -- to pass --prefixed flags and options which would otherwise be parsed by npm.

For example:

```
npm run test -- --grep="pattern"
```

The arguments will only be passed to the script specified after npm run and not to any pre or post script.

The env script is a special built-in command that can be used to list environment variables that will be available to the script at runtime. If an "env" command is defined in your package, it will take precedence over the built-in.

In addition to the shell's pre-existing PATH, npm run adds node_modules/.bin to the PATH provided to scripts. Any binaries provided by locally-installed dependencies can be used without the node_modules/.bin prefix. For example, if there is a devDependency on tap in your package, you should write:

```
"scripts": {"test": "tap test/*.js"}
instead of
"scripts": {"test": "node_modules/.bin/tap test/*.js"}
```

The actual shell your script is run within is platform dependent. By default, on Unix-like systems it is the /bin/sh command, on Windows it is cmd.exe.

The actual shell referred to by /bin/sh also depends on the system. You can customize the shell with the script-shell configuration.

Scripts are run from the root of the package folder, regardless of what the current working directory is when npm run is called. If you want your script to use different behavior based on what subdirectory you're in, you can use the INIT_CWD environment variable, which holds the full path you were in when you ran npm run.

npm run sets the NODE environment variable to the node executable with which npm is executed.

If you try to run a script without having a node_modules directory and it fails, you will be given a warning to run npm install, just in case you've forgotten.

Workspaces support

You may use the workspace or workspaces configs in order to run an arbitrary command from a package's "scripts" object in the context of the specified workspaces. If no "command" is provided, it will list the available scripts for each of these configured workspaces.

Given a project with configured workspaces, e.g.

```
.
+-- package.json
--- packages
+-- a
| `-- package.json
+-- b
| `-- package.json
`-- c
`-- package.json
```

Assuming the workspace configuration is properly set up at the root level package.json file. e.g:

```
{
    "workspaces": [ "./packages/*" ]
}
```

And that each of the configured workspaces has a configured test script, we can run tests in all of them using the workspaces config:

```
npm test --workspaces
```

Filtering workspaces It's also possible to run a script in a single workspace using the workspace config along with a name or directory path:

```
npm test --workspace=a
```

The workspace config can also be specified multiple times in order to run a specific script in the context of multiple workspaces. When defining values for the workspace config in the command line, it also possible to use -w as a shorthand, e.g.:

```
npm test -w a -w b
```

This last command will run test in both ./packages/a and ./packages/b packages.

Configuration

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: falseType: 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.

if-present

Default: false Type: Boolean

If true, npm will not exit with an error code when run-script is invoked for a script that isn't defined in the scripts section of package.json. This option can be used when it's desirable to optionally run a script when it's present and fail if the script fails. This is useful, for example, when running scripts that may only apply for some builds in an otherwise generic CI setup.

ignore-scripts

Default: falseType: Boolean

If true, npm does not run scripts specified in package.json files.

Note that commands explicitly intended to run a particular script, such as npm start, npm stop, npm restart, npm test, and npm run-script will still run their intended script if ignore-scripts is set, but they will *not* run any pre- or post-scripts.

script-shell

- Default: '/bin/sh' on POSIX systems, 'cmd.exe' on Windows
- Type: null or String

The shell to use for scripts run with the npm exec, npm run and npm init <pkg> commands.

See Also

- npm scripts
- npm test
- npm start
- npm restart
- npm stop
- npm config
- npm workspaces