



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'runc-spec.8' command

\$ man runc-spec.8

runc-spec(8) System Manager's Manual runc-spec(8)

NAME

runc-spec - create a new specification file

SYNOPSIS

runc spec [option ...]

DESCRIPTION

The `spec` command creates the new specification file named `config.json` for the bundle.

The spec generated is just a starter file. Editing of the spec is required to achieve desired results. For example, the newly generated spec includes an `args` parameter that is initially set to call the `sh` command when the container is started. Calling `sh` may work for an `ubuntu` container or `busybox`, but will not work for containers that do not include the `sh` binary.

OPTIONS

`--bundle|-b path`

Set path to the root of the bundle directory.

`--rootless`

Generate a configuration for a rootless container. Note this option is entirely different from the global `--rootless` option.

EXAMPLES

To run a simple "hello-world" container, one needs to set the `args` parameter in the `spec` to call `hello`. This can be done using `sed(1)`,

jq(1), or a text editor.

The following commands will:

- create a bundle for hello-world;
- change the command to run in a container to /hello using jq(1);
- run the hello command in a new hello-world container named container1.

```
mkdir hello
```

```
cd hello
```

```
docker pull hello-world
```

```
docker export $(docker create hello-world) > hello-world.tar
```

```
mkdir rootfs
```

```
tar -C rootfs -xf hello-world.tar
```

```
runc spec
```

```
jq '.process.args |= ["/hello"]' < config.json > new.json
```

```
mv -f new.json config.json
```

```
runc run container1
```

In the run command above, container1 is the name for the instance of the container that you are starting. The name you provide for the container instance must be unique on your host.

An alternative for generating a customized spec config is to use oci-runtime-tool; its sub-command oci-runtime-tool generate has lots of options that can be used to do any customizations as you want. See run? time-tools ?<https://github.com/opencontainers/runtime-tools>? to get more information.

When starting a container through runc, the latter usually needs root privileges. If not already running as root, you can use sudo(8), for example:

```
sudo runc start container1
```

Alternatively, you can start a rootless container, which has the ability to run without root privileges. For this to work, the specification file needs to be adjusted accordingly. You can pass the --rootless option to this command to generate a proper rootless spec file.

runc-run(8), runc(8).

runc-spec(8)