



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'podman-unshare.1' command

\$ man podman-unshare.1

podman-unshare(1) General Commands Manual podman-unshare(1)

NAME

podman-unshare - Run a command inside of a modified user namespace

SYNOPSIS

podman unshare [options] [command]

DESCRIPTION

Launches a process (by default, \$SHELL) in a new user namespace. The user namespace is configured so that the invoking user's UID and primary GID appear to be UID 0 and GID 0, respectively. Any ranges which match that user and group in /etc/subuid and /etc/subgid are also mapped in as themselves with the help of the newuidmap(1) and newgidmap(1) helpers.

podman unshare is useful for troubleshooting unprivileged operations and for manually clearing storage and other data related to images and containers.

It is also useful to use the podman mount command. If an unprivileged user wants to mount and work with a container, then they need to execute podman unshare. Executing podman mount fails for unprivileged users unless the user is running inside a podman unshare session.

The unshare session defines two environment variables:

? CONTAINERS_GRAPHROOT: the path to the persistent container's data.

? CONTAINERS_RUNROOT: the path to the volatile container's data.

IMPORTANT: This command is not available with the remote Podman client.

OPTIONS

--help, -h

Print usage statement

--rootless-netns

Join the rootless network namespace used for `netavark` networking. It can be used to connect to a rootless container via IP address (bridge networking). This is otherwise not possible from the host network namespace.

Exit Codes

The exit code from `podman unshare` gives information about why the container failed to run or why it exited. When `podman unshare` commands exit with a non-zero code, the exit codes follow the `chroot` standard, see below:

125 The error is with podman itself

```
$ podman unshare --foo; echo $?
```

```
Error: unknown flag: --foo
```

```
125
```

126 Executing a contained command and the command cannot be invoked

```
$ podman unshare /etc; echo $?
```

```
Error: fork/exec /etc: permission denied
```

```
126
```

127 Executing a contained command and the command cannot be found

```
$ podman unshare foo; echo $?
```

```
Error: fork/exec /usr/bin/bogus: no such file or directory
```

```
127
```

Exit code contained command exit code

```
$ podman unshare /bin/sh -c 'exit 3'; echo $?
```

```
3
```

EXAMPLE

```
$ podman unshare id
```

```
uid=0(root) gid=0(root) groups=0(root),65534(nobody)
```

```
$ podman unshare cat /proc/self/uid_map /proc/self/gid_map
```

```
0 1000 1
1 10000 65536
0 1000 1
1 10000 65536
```

```
$ podman unshare --rootless-netns ip addr
```

```
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
```

```
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
```

```
inet 127.0.0.1/8 scope host lo
```

```
valid_lft forever preferred_lft forever
```

```
inet6 ::1/128 scope host
```

```
valid_lft forever preferred_lft forever
```

```
2: tap0: <BROADCAST,UP,LOWER_UP> mtu 65520 qdisc fq_codel state UNKNOWN group default qlen 1000
```

```
link/ether aa:8c:0b:73:98:f6 brd ff:ff:ff:ff:ff:ff
```

```
inet 10.0.2.100/24 brd 10.0.2.255 scope global tap0
```

```
valid_lft forever preferred_lft forever
```

```
inet6 fd00::a88c:bff:fe73:98f6/64 scope global dynamic mngtmpaddr
```

```
valid_lft 86389sec preferred_lft 14389sec
```

```
inet6 fe80::a88c:bff:fe73:98f6/64 scope link
```

```
valid_lft forever preferred_lft forever
```

SEE ALSO

podman(1), podman-mount(1), namespaces(7), newuidmap(1), newgidmap(1),
user_namespaces(7)

podman-unshare(1)