



Rocky Enterprise Linux 9.2 Manual Pages on command 'podman-cp.1'

\$ man podman-cp.1

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

NAME

podman-cp - Copy files/folders between a container and the local filesystem

SYNOPSIS

```
podman cp [options] [container:]src_path [container:]dest_path
podman container cp [options] [container:]src_path [container:]dest_path
```

DESCRIPTION

podman cp allows copying the contents of src_path to the dest_path. Files can be copied from a container to the local machine and vice versa or between two containers. If - is specified for either the SRC_PATH or DEST_PATH, one can also stream a tar archive from STDIN or to STDOUT. The containers can be either running or stopped and the src_path or dest_path can be a file or directory.

***IMPORTANT:** The podman cp command assumes container paths are relative to the container's root directory (/), which means supplying the ini?

tial forward slash is optional and therefore sees `compassionate_darwin:/tmp/foo/myfile.txt` and `compassionate_darwin:tmp/foo/myfile.txt` as identical.*

Local machine paths can be an absolute or relative value. The `cp` command interprets a local machine's relative paths as relative to the current working directory where `podman cp` is run.

Assuming a path separator of `/`, a first argument of `src_path` and second argument of `dest_path`, the behavior is as follows:

`src_path` specifies a file:

- `dest_path` does not exist
 - the file is saved to a file created at `dest_path` (note that parent directory must exist).
- `dest_path` exists and is a file
 - the destination is overwritten with the source file's contents.
- `dest_path` exists and is a directory
 - the file is copied into this directory using the base name from `src_path`.

`src_path` specifies a directory:

- `dest_path` does not exist
 - `dest_path` is created as a directory and the contents of the source directory are copied into this directory.
- `dest_path` exists and is a file
 - Error condition: cannot copy a directory to a file.
- `dest_path` exists and is a directory
 - `src_path` ends with `/`
 - the source directory is copied into this directory.
 - `src_path` ends with `./` (i.e., slash followed by dot)
 - the content of the source directory is copied into this directory.

The `cp` command requires `src_path` and `dest_path` to exist according to the above rules.

If `src_path` is local and is a symbolic link, the symbolic target, is copied by default.

A colon (:) is used as a delimiter between a container and its path, it can also be used when specifying paths to a `src_path` or `dest_path` on a local machine, for example, `file:name.txt`.

***IMPORTANT:** while using a colon (:) in a local machine path, one must be explicit with a relative or absolute path, for example:

`/path/to/file:name.txt` or `./file:name.txt*`

Using `-` as the `src_path` streams the contents of STDIN as a tar archive.

The command extracts the content of the tar to the `DEST_PATH` in the container. In this case, `dest_path` must specify a directory. Using `-` as the `dest_path` streams the contents of the resource (can be a directory) as a tar archive to STDOUT.

Note that `podman cp` ignores permission errors when copying from a running rootless container. The TTY devices inside a rootless container are owned by the host's root user and hence cannot be read inside the container's user namespace.

Further note that `podman cp` does not support globbing (e.g., `cp dir/*.txt`). To copy multiple files from the host to the container use `xargs(1)` or `find(1)` (or similar tools for chaining commands) in conjunction with `podman cp`. To copy multiple files from the container to the host, use `podman mount CONTAINER` and operate on the returned mount point instead (see ALTERNATIVES below).

OPTIONS

`--archive, -a`

Archive mode (copy all uid/gid information). When set to true, files copied to a container will have changed ownership to the primary UID/GID of the container. When set to false, maintain uid/gid from archive sources instead of changing them to the primary uid/gid of the destination container. The default is true.

`--overwrite`

Allow directories to be overwritten with non-directories and vice versa. By default, `podman cp` errors out when attempting to overwrite, for instance, a regular file with a directory.

ALTERNATIVES

Podman has much stronger capabilities than just podman cp to achieve copying files between the host and containers.

Using standard podman-mount(1) and podman-unmount(1) takes advantage of the entire linux tool chain, rather than just cp.

copying contents out of a container or into a container, can be achieved with a few simple commands. For example:

To copy the /etc/foobar directory out of a container and onto /tmp on the host, the following commands can be executed:

```
mnt=$(podman mount CONTAINERID)
```

```
cp -R ${mnt}/etc/foobar /tmp
```

```
podman umount CONTAINERID
```

To untar a tar ball into a container, following commands can be executed:

```
mnt=$(podman mount CONTAINERID)
```

```
tar xf content.tgz -C ${mnt}
```

```
podman umount CONTAINERID
```

To install a package into a container that does not have dnf installed, following commands can be executed:

```
mnt=$(podman mount CONTAINERID)
```

```
dnf install --installroot=${mnt} httpd
```

```
chroot ${mnt} rm -rf /var/log/dnf /var/cache/dnf
```

```
podman umount CONTAINERID
```

By using podman mount and podman unmount, one can use all of the standard linux tools for moving files into and out of containers, not just the cp command.

EXAMPLES

? Copy a file from host to a container.

```
podman cp /myapp/app.conf containerID:/myapp/app.conf
```

? Copy a file from a container to a directory on another container.

```
podman cp containerID1:/myfile.txt containerID2:/tmp
```

? Copy a directory on a container to a directory on the host.

```
podman cp containerID:/myapp/ /myapp/
```

? Copy the contents of a directory on a container to a directory on the host.

```
podman cp containerID:/home/myuser/. /home/myuser/
```

? Copy a directory on a container into a directory on another.

```
podman cp containerA:/myapp containerB:/newapp
```

? Stream a tar archive from STDIN to a container.

```
podman cp - containerID:/myfiles.tar.gz < myfiles.tar.gz
```

SEE ALSO

podman(1), podman-mount(1), podman-unmount(1)

podman-cp(1)