

NAME

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

SYNOPSIS

docker container cp [OPTIONS] CONTAINER:SRC_PATH DEST_PATH|- **docker cp [OP-**
TIONS] SRC_PATH|- CONTAINER:DEST_PATH

DESCRIPTION

The `docker container cp` utility copies the contents of `SRC_PATH` to the `DEST_PATH`. You can copy from the container's file system to the local machine or the reverse, from the local filesystem to the container. If `-` is specified for either the `SRC_PATH` or `DEST_PATH`, you can also stream a tar archive from `STDIN` or to `STDOUT`. The `CONTAINER` can be a running or stopped container. The `SRC_PATH` or `DEST_PATH` can be a file or directory.

The `docker container cp` command assumes container paths are relative to the container's `/` (root) directory. This means supplying the initial forward slash is optional; The command 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 command interprets a local machine's relative paths as relative to the current working directory where `docker container cp` is run.

The `cp` command behaves like the Unix `cp -a` command in that directories are copied recursively with permissions preserved if possible. Ownership is set to the user and primary group at the destination. For example, files copied to a container are created with `UID:GID` of the root user. Files copied to the local machine are created with the `UID:GID` of the user which invoked the `docker container cp` command. If you specify the `-L` option, `docker container cp` follows any symbolic link in the `SRC_PATH`. `docker container cp` does *not* create parent directories for `DEST_PATH` if they do not exist.

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`
- `DEST_PATH` does not exist and ends with `/`
 - Error condition: the destination 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 basename 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 does not end with / . (that is: *slash* followed by *dot*)
 - the source directory is copied into this directory
 - SRC_PATH does end with / . (that is: *slash* followed by *dot*)
 - the *content* of the source directory is copied into this directory

The 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 link, not the target, is copied by default. To copy the link target and not the link, specify the `-L` option.

A colon (:) is used as a delimiter between CONTAINER and its path. You can also use `:` when specifying paths to a SRC_PATH or DEST_PATH on a local machine, for example `file:name.txt`. If you use a `:` in a local machine path, you must be explicit with a relative or absolute path, for example:

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

It is not possible to copy certain system files such as resources under `/proc`, `/sys`, `/dev`, `tmpfs`, and mounts created by the user in the container. However, you can still copy such files by manually running `tar` in `docker exec`. For example (consider SRC_PATH and DEST_PATH are directories):

```
$ docker exec foo tar Ccf $(dirname SRC_PATH) - $(basename SRC_PATH) | tar Cxf DEST_PATH -
```

or

```
$ tar Ccf $(dirname SRC_PATH) - $(basename SRC_PATH) | docker exec -i foo tar Cxf DEST_PATH -
```

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 container's filesystem. In this case, `DEST_PATH` must specify a directory. Using `-` as the `DEST_PATH` streams the contents of the resource as a tar archive to `STDOUT`.

EXAMPLES

Suppose a container has finished producing some output as a file it saves to somewhere in its filesystem. This could be the output of a build job or some other computation. You can copy these outputs from the container to a location on your local host.

If you want to copy the `/tmp/foo` directory from a container to the existing `/tmp` directory on your host. If you run `docker container cp` in your `~` (home) directory on the local host:

```
$ docker container cp compassionate_darwin:tmp/foo /tmp
```

Docker creates a `/tmp/foo` directory on your host. Alternatively, you can omit the leading slash in the command. If you execute this command from your home directory:

```
$ docker container cp compassionate_darwin:tmp/foo tmp
```

If `~/tmp` does not exist, Docker will create it and copy the contents of `/tmp/foo` from the container into this new directory. If `~/tmp` already exists as a directory, then Docker will copy the contents of `/tmp/foo` from the container into a directory at `~/tmp/foo`.

When copying a single file to an existing `LOCALPATH`, the `docker container cp` command will either overwrite the contents of `LOCALPATH` if it is a file or place it into `LOCALPATH` if it is a directory, overwriting an existing file of the same name if one exists. For example, this command:

```
$ docker container cp sharp_ptolemy:tmp/foo/myfile.txt /test
```

If `/test` does not exist on the local machine, it will be created as a file with the contents of `/tmp/foo/myfile.txt` from the container. If `/test` exists as a file, it will be overwritten. Lastly, if `/test` exists as a directory, the file will be copied to `/test/myfile.txt`.

Next, suppose you want to copy a file or folder into a container. For example, this could be a configuration file or some other input to a long running computation that you would like to place into a created container before it starts. This is useful because it does not require the configuration file or other input to exist in the container image.

If you have a file, `config.yml`, in the current directory on your local host and wish to copy it to an existing directory at `/etc/my-app.d` in a container, this command can be used:

```
$ docker container cp config.yml myappcontainer:/etc/my-app.d
```

If you have several files in a local directory `/config` which you need to copy to a directory `/etc/my-`

app.d in a container:

```
$ docker container cp /config/. myappcontainer:/etc/my-app.d
```

The above command will copy the contents of the local `/config` directory into the directory `/etc/my-app.d` in the container.

Finally, if you want to copy a symbolic link into a container, you typically want to copy the linked target and not the link itself. To copy the target, use the `-L` option, for example:

```
$ ln -s /tmp/somefile /tmp/somefile.ln
$ docker container cp -L /tmp/somefile.ln myappcontainer:/tmp/
```

This command copies content of the local `/tmp/somefile` into the file `/tmp/somefile.ln` in the container. Without `-L` option, the `/tmp/somefile.ln` preserves its symbolic link but not its content.

OPTIONS

- a, --archive[=false]** Archive mode (copy all uid/gid information)
- L, --follow-link[=false]** Always follow symbol link in SRC_PATH
- h, --help[=false]** help for cp

SEE ALSO

docker-container(1)