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

\$ man podman-pull.1

podman-pull(1()) podman-pull(1())

NAME

podman-pull - Pull an image from a registry

SYNOPSIS

```
podman pull [options] source [source...]
podman image pull [options] source [source...]
podman pull [options] [transport]name[:tag]@digest]
podman image pull [options] [transport]name[:tag]@digest]
```

DESCRIPTION

podman pull copies an image from a registry onto the local machine. The command can pull one or more images. If the image reference in the command line argument does not contain a registry, it is referred to as a short-name reference. If the image is a 'short-name' reference, Podman will prompt the user for the specific container registry to pull the image from, if an alias for the short-name has not been specified in the short-name-aliases.conf. If an image tag is not specified, podman pull defaults to the image with the latest tag (if it exists) and pulls it. After the image is pulled, podman will print the full image ID. podman pull can also pull images using a digest podman pull image@digest and can also be used to pull images from archives and local storage using different transports. **IMPORTANT:** Images are stored in local image storage.

SOURCE

SOURCE is the location from the container image is pulled from. It supports all transports from containers-transports(5). If no transport is specified, the input is subject to short-name resolution and the docker (i.e., container registry) transport is used. For

remote clients, docker is the only supported transport.

```
# Pull from a container registry
```

```
$ podman pull quay.io/username/myimage
```

```
# Pull from a container registry with short-name resolution
```

```
$ podman pull fedora
```

```
# Pull from a container registry via the docker transport
```

```
$ podman pull docker://quay.io/username/myimage
```

```
# Pull from a local directory
```

```
$ podman pull dir:/tmp/myimage
```

```
# Pull from a tarball in the docker-archive format
```

```
$ podman pull docker-archive:/tmp/myimage
```

```
# Pull from a local docker daemon
```

```
$ sudo podman pull docker-daemon:docker.io/library/myimage:33
```

```
# Pull from a tarball in the OCI-archive format
```

```
$ podman pull oci-archive:/tmp/myimage
```

OPTIONS

`--all-tags`

All tagged images in the repository will be pulled.

***IMPORTANT:** When using the `all-tags` flag, Podman will not iterate over the search registries in the `containers-registries.conf(5)` but will always use `docker.io` for unqualified image names.*

`--arch=ARCH`

Override the architecture, defaults to hosts, of the image to be pulled. For example, `arm`.

`--authfile=path`

Path of the authentication file. If the authorization state is not found there,

`$HOME/.docker/config.json` is checked, which is set using `docker login`.

Default is `$(XDG_RUNTIME_DIR)/containers/auth.json`, which is set using `podman login`.

IMPORTANT: The default path of the authentication file can be overwritten by setting the `REGISTRY_AUTH_FILE` environment variable. `export REGISTRY_AUTH_FILE=path`

`--cert-dir=path`

Use certificates at path (`*.crt`, `*.cert`, `*.key`) to connect to the registry. (Default:

`/etc/containers/certs.d`) Please refer to `containers-certs.d(5)` for details. (This option

is not available with the remote Podman client)

`--creds=[username[:password]]`

The `[username[:password]]` to use to authenticate with the registry if required. If one or both values are not supplied, a command line prompt will appear and the value can be entered. The password is entered without echo.

`--disable-content-trust`

This is a Docker specific option to disable image verification to a Docker registry and is not supported by Podman. This flag is a NOOP and provided solely for scripting compatibility.

`--help, -h`

Print the usage statement.

`--os=OS`

Override the OS, defaults to hosts, of the image to be pulled. For example, windows.

`--platform=OS/ARCH`

Specify the platform for selecting the image. The `--platform` option can be used to override the current architecture and operating system.

IMPORTANT: Conflicts with `--arch` and `--os`

`--quiet, -q`

Suppress output information when pulling images

`--tls-verify=true|false`

Require HTTPS and verify certificates when contacting registries (default: true). If explicitly set to true, then TLS verification will be used. If set to false, then TLS verification will not be used. If not specified, TLS verification will be used unless the target registry is listed as an insecure registry in `registries.conf`.

`--variant=VARIANT`

Use `VARIANT` instead of the default architecture variant of the container image. Some images can use multiple variants of the arm architectures, such as `arm/v5` and `arm/v7`.

FILES

`short-name-aliases.conf` (`/var/cache/containers/short-name-aliases.conf`, `$HOME/.cache/containers/short-name-aliases.conf`)

When users specify images that do not include the container registry where the image is stored, this is called a short name. The use of unqualified-search registries entails an ambiguity as it is unclear from which registry a given image, referenced by a short name, may be pulled from.

Using short names is subject to the risk of hitting squatted registry namespaces. If the unqualified-search registries are set to ["public-registry.com", "my-private-registry.com"] an attacker may take over a namespace of public-registry.com such that an image may be pulled from public-registry.com instead of the intended source my-private-registry.com.

While it is highly recommended to always use fully-qualified image references, existing deployments using short names may not be easily changed. To circumvent the aforementioned ambiguity, so called short-name aliases can be configured that point to a fully-qualified image reference. Distributions often ship a default shortnames.conf expansion file in /etc/containers/registries.conf.d/ directory. Administrators can use this directory to add their own local short-name expansion files.

When pulling an image, if the user does not specify the complete registry, containers attempt to expand the short-name into a full name. If the command is executed with a tty, the user will be prompted to select a registry from the default list of registries defined in registries.conf. The user's selection is then stored in a cache file to be used in all future short-name expansions. Rootful short-names are stored in /var/cache/containers/short-name-aliases.conf. Rootless short-names are stored in the \$HOME/.cache/containers/short-name-aliases.conf file.

For more information on short-names, see containers-registries.conf(5)

registries.conf (/etc/containers/registries.conf)

registries.conf is the configuration file which specifies which container registries should be consulted when completing image names which do not include a registry or domain portion.

NOTE: Use the environment variable TMPDIR to change the temporary storage location of downloaded container images. Podman defaults to use /var/tmp.

EXAMPLES

Pull a single image with short name resolution.

```
$ podman pull alpine:latest
```

```
Resolved "alpine" as an alias (/etc/containers/registries.conf.d/000-shortnames.conf)
```

```
Trying to pull docker.io/library/alpine:latest...
```

```
Getting image source signatures
```

```
Copying blob 5843afab3874 done
```

```
Copying config d4ff818577 done
```

Writing manifest to image destination

Storing signatures

d4ff818577bc193b309b355b02ebc9220427090057b54a59e73b79bdfc139b83

Pull multiple images with/without short name resolution.

podman pull busybox:musl alpine quay.io/libpod/cirros

Trying to pull docker.io/library/busybox:musl...

Getting image source signatures

Copying blob 0c52b060233b [-----] 0.0b / 0.0b

Copying config 9ad2c435a8 done

Writing manifest to image destination

Storing signatures

9ad2c435a887e3f723654e09b48563de44aa3c7950246b2e9305ec85dd3422db

Trying to pull docker.io/library/alpine:latest...

Getting image source signatures

Copying blob 5843afab3874 [-----] 0.0b / 0.0b

Copying config d4ff818577 done

Writing manifest to image destination

Storing signatures

d4ff818577bc193b309b355b02ebc9220427090057b54a59e73b79bdfc139b83

Trying to pull quay.io/libpod/cirros:latest...

Getting image source signatures

Copying blob 8da581cc9286 done

Copying blob 856628d95d17 done

Copying blob f513001ba4ab done

Copying config 3c82e4d066 done

Writing manifest to image destination

Storing signatures

3c82e4d066cf6f9e50efae6d6e3ff7fdddf5527826afd68e5a969579fc4db4a

Pull an image using its digest.

\$ podman pull alpine@sha256:d7342993700f8cd7aba8496c2d0e57be0666e80b4c441925fc6f9361fa81d10e

Trying to pull

docker.io/library/alpine@sha256:d7342993700f8cd7aba8496c2d0e57be0666e80b4c441925fc6f9361fa81d10e...

Getting image source signatures

Copying blob 188c0c94c7c5 done

Copying config d6e46aa247 done

Writing manifest to image destination

Storing signatures

d6e46aa2470df1d32034c6707c8041158b652f38d2a9ae3d7ad7e7532d22ebe0

Pull an image by specifying an authentication file.

```
$ podman pull --authfile temp-auths/myauths.json docker://docker.io/umohnani/finaltest
```

Trying to pull docker.io/umohnani/finaltest:latest...Getting image source signatures

Copying blob sha256:6d987f6f42797d81a318c40d442369ba3dc124883a0964d40b0c8f4f7561d913

1.90 MB / 1.90 MB [=====] 0s

Copying config sha256:ad4686094d8f0186ec8249fc4917b71faa2c1030d7b5a025c29f26e19d95c156

1.41 KB / 1.41 KB [=====] 0s

Writing manifest to image destination

Storing signatures

03290064078cb797f3e0a530e78c20c13dd22a3dd3adf84a5da2127b48df0438

Pull an image by authenticating to a registry.

```
$ podman pull --creds testuser:testpassword docker.io/umohnani/finaltest
```

Trying to pull docker.io/umohnani/finaltest:latest...Getting image source signatures

Copying blob sha256:6d987f6f42797d81a318c40d442369ba3dc124883a0964d40b0c8f4f7561d913

1.90 MB / 1.90 MB [=====] 0s

Copying config sha256:ad4686094d8f0186ec8249fc4917b71faa2c1030d7b5a025c29f26e19d95c156

1.41 KB / 1.41 KB [=====] 0s

Writing manifest to image destination

Storing signatures

03290064078cb797f3e0a530e78c20c13dd22a3dd3adf84a5da2127b48df0438

Pull an image using tls verification.

```
$ podman pull --tls-verify=false --cert-dir image/certs docker.io/umohnani/finaltest
```

Trying to pull docker.io/umohnani/finaltest:latest...Getting image source signatures

Copying blob sha256:6d987f6f42797d81a318c40d442369ba3dc124883a0964d40b0c8f4f7561d913

1.90 MB / 1.90 MB [=====] 0s

Copying config sha256:ad4686094d8f0186ec8249fc4917b71faa2c1030d7b5a025c29f26e19d95c156

1.41 KB / 1.41 KB [=====] 0s

Writing manifest to image destination

Storing signatures

03290064078cb797f3e0a530e78c20c13dd22a3dd3adf84a5da2127b48df0438

Pull an image by overriding the host architecture.

```
$ podman pull --arch=arm arm32v7/debian:stretch
```

Trying to pull docker.io/arm32v7/debian:stretch...

Getting image source signatures

Copying blob b531ae4a3925 done

Copying config 3cba58dad5 done

Writing manifest to image destination

Storing signatures

3cba58dad5d9b35e755b48b634acb3fdd185ab1c996ac11510cc72c17780e13c

SEE ALSO

podman(1), podman-push(1), podman-login(1), containers-certs.d(5), containers-reg?

istries.conf(5), containers-transport(5)

HISTORY

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podman-pull(1)