crane Registry swiss knife

CONCEPTS

crane talks straight to registries with no daemon: copy keeps the digest and moves only missing layers, so it beats pull, tag and push.

Registry tags, manifests, blobs
↓ pull / export
crane no daemon, no root
↓ push / append
Local tarball or OCI layout directory

Registry commands read and write remote images; only pull, push and export touch local files

Image reference forms

Form	Meaning
`<repo>:<tag>`	Tag: can move
`<repo>@sha256:<hex>`	Digest: immutable
`<registry>/<repo>`	Host-qualified; bare names mean Docker Hub
`-`	Stdin or stdout in export

Global flags such as --platform and --insecure apply to every command. Without --platform, commands act on all platforms of an index.

INSPECT

crane ls *<repo>*
List tags in a repository

crane digest *<image>*
Print the image digest

crane manifest *<image>*
Print the manifest (or index)

crane config *<image>*
Print the image config JSON

crane catalog *<registry>*
List repositories in a registry

crane ls --omit-digest-tags *<repo>*
Hide sha256-... tags

crane manifest --platform *<os/arch>* *<image>*
Manifest of one platform

COPY & TAG

crane copy *<src>* *<dst>*
Copy an image, keeping its digest

crane copy --all-tags *<src-repo>* *<dst-repo>*
Copy every tag of a repo

crane tag *<image>* *<new-tag>*
Add a tag without re-uploading

crane delete *<image>*
Delete an image reference

crane copy --platform *<os/arch>* *<src>* *<dst>*
Copy a single platform

PULL, PUSH & EXPORT

crane pull *<image>* *<file.tar>*
Save an image as a tarball

crane pull --format oci *<image>* *<dir>*
Save as an OCI layout directory

crane push *<file.tar>* *<image>*
Push a tarball to a registry

crane push *<oci-dir>* *<image>*
Push an OCI layout directory

crane export *<image>* *<file.tar>*
Write filesystem to a tarball

crane export *<image>* **- | tar -tf -**
Stream the filesystem to tar

MODIFY IMAGES

crane append -b *<base>* **-f** *<layer.tar>* **-t** *<image>*
Add a layer on a base and push

crane mutate *<image>* **-t** *<new-tag>* **--entrypoint** *<cmd>*
Change the entrypoint

AUTH & TLS

crane auth login *<registry>* **-u** *<user>* **-p** *<password>*
Log in and store credentials