dive Explore image layers

CONCEPTS

Left pane lists the image layers, right pane the file tree at the selected layer. Tab moves the focus between them.



Left: layers and their size. Right: files, coloured by change.

Tree colours: green added, red removed, yellow modified, plain unchanged.

dive reads the image from a container engine or an archive; pick one with --source. Keys below are the defaults and can be remapped in the config.

RUN DIVE

`dive <image>`
Analyze a local image

`dive build -t <tag> .`
Build with docker, then analyze

`dive --source <engine> <image>`
Choose the image source

`dive <engine>://<image>`
Same, as a URL-style prefix

`dive docker-archive://<file.tar>`
Analyze a saved image tarball

`dive --ci-config <file> <image>`
Use another .dive-ci file

`dive --ignore-errors <image>`
Carry on after archive parse errors

`dive --version`
Show the version

`CI=true dive <image>`
Skip the UI, exit code gives pass or fail

MOVE AROUND

Tab
Switch between layers and file tree

MOVE AROUND (cont.)

Up / Down
Move selection (also K / J)

Left / Right
Move left / right (also H / L)

PageUp / PageDown
Scroll a page (also U / D)

Ctrl + C / Q Quit

LAYERS

Ctrl + L
Show changes of the selected layer only

Ctrl + A
Layers: aggregate / tree: show added files

The image details panel shows the total size, wasted space and an efficiency score.

FILE TREE

Space
Collapse or expand a directory

Ctrl + Space
Collapse or expand all directories

Ctrl + F Filter files by path

Esc Close the file filter

Ctrl + R Toggle removed files

Ctrl + M Toggle modified files

Ctrl + U
Toggle unmodified files

Ctrl + B
Toggle file attributes (mode, owner, size)

CI MODE

Put rules in .dive-ci at the repo root; exit code is non-zero when a rule fails.

`lowestEfficiency: 0.95`
Fail below this efficiency ratio

`highestWastedBytes: 20MB`
Fail at or above this wasted size

CI MODE (cont.)

`highestUserWastedPercent: 0.20`
Fail at or above this wasted share

highestUserWastedPercent ignores the base image layer when computing the share.

CONFIG

Config is read from $XDG_CONFIG_HOME/dive/, ~/.config/dive/ or ~/.dive.yaml.

~/.config/dive/dive.yaml

```
container-engine: podman
diff:
  hide: [unmodified]
filetree:
  collapse-dir: true
  pane-width: 0.4
keybinding:
  quit: ctrl+c, q
```

Remappable actions have names such as toggle-view, filter-files, page-up and toggle-unmodified-files; several keys are separated by commas.

DOCKER_HOST points dive at a non-default engine socket (Colima and similar).

RECIPES

Find what bloats an image

```
dive <image>
# Ctrl+L on a big layer
# Ctrl+U to hide unchanged files
# Ctrl+F to filter by path
```

Gate a build in CI

```
cat > .dive-ci <<'EOF'
rules:
  lowestEfficiency: 0.95
  highestWastedBytes: 20MB
EOF
CI=true dive <image>
```

Analyze a podman image

```
dive --source podman <image>
# make it the default in the
config file:
# container-engine: podman
```

Inspect an image without a daemon

```
docker save <image> -o image.tar
dive docker-archive://image.tar
```