
docker-registry-cleaner

Release 1.0.0

Apr 17, 2019

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Smart Docker Registry cleaner.

Official repositories

GitHub: <https://github.com/glorpen/docker-registry-cleaner>

BitBucket: <https://bitbucket.org/glorpen/docker-registry-cleaner>

Docker Hub: <https://hub.docker.com/r/glorpen/registry-cleaner>

1.1 Contents

1.1.1 Docker Registry Cleaner

Smart Docker Registry cleaner.

Official repositories

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BitBucket: <https://bitbucket.org/glorpen/docker-registry-cleaner>

Docker Hub: <https://hub.docker.com/r/glorpen/registry-cleaner>

1.1.2 Features

- removing tags
- running garbage-collect
- cleaning empty repos (without tags)
- cleaning tags with regex and semantic versioning

- removing unknown tags
- no configuration changes in real registry service

Container

Container version uses bundled Docker Registry binary, see Bundled registry versions table below.

Bundled registry versions

cleaner	registry
1.0.0	2.7.1

1.1.3 State of Docker Registry

Workarounds for versions 2.6+ of Docker Registry.

See <https://github.com/docker/distribution/issues/1811>

Safe tag deletion

Docker Registry has no native support for deleting single tag from an image.

Fortunately it is possible to workaround this problem so Docker Registry Cleaner will **safely** remove tag from image, without removing image itself. The process is quite simple:

- find tags to remove
- upload fake image
- re-tag found tags to new image
- remove image with REST API call

Remove empty repositories

There is no way to remove repository using REST API, even one without tags - empty repo is still listed by registry. Currently files should be cleaned on GC run on registry side (or some third party app, like this one).

1.1.4 Example configuration

Regex matching

Removes build tags created by CI:

```
patterns:
  latest:
    - "latest"
  ci:
    "r-([0-9]+)": "\\1"
    "build-([0-9]+)": "\\1"
```

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```
repositories:
  some-name:
    paths:
      - "library/*"
    cleaners:
      latest:
        type: pattern
        pattern: ci
        max_items: 10
```

Remove unknown tags

Removes tags that are not known for groups before it.

```
repositories:
  some-name:
    paths:
      - "library/*":
    cleaners:
      # ... other groups ...
      other:
        type: max
        max_items: 0
```

Semver tags

As in <http://semver.org/>

```
versioned:
  type: semver
  max_items: 100
  groups:
    current_minor:
      where:
        major: latest
        minor: latest
      preserve:
        patch: 6
    current_major:
      where:
        major: latest
        minor:
          min: 0
          max: latest - 1
      preserve:
        patch: 1
    archival:
      where:
        major:
          max: latest - 1
      preserve:
        minor: 1
```

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```
patch: 1
max_items: 20
```

Above config will:

- save only up to 100 newest versions
- save up to 6 versions with latest major & minor revisions
- save latest patch version for each minor release in latest major version (2.1.1, 2.2.10 but no 2.2.9)
- save latest minor & patch version for older major revisions

For more info see <https://docker-registry-cleaner.readthedocs.io/en/latest/code/selectors.html#glorpen-docker-registry-cleaner-selectors-semver>

1.1.5 Usage

App requires two paths:

- configuration file
- registry data, /var/lib/registry by default

It is advised to temporarily disable real registry (as when using normal registry garbage-collect).

For example, to list repos:

```
docker run --rm -v `pwd`: /srv glorpen/registry-cleaner /srv/config.yml -d /srv/
↳registry-data list-repos
```

and then to clean:

```
docker run --rm -v `pwd`: /srv glorpen/registry-cleaner /srv/config.yml -d /srv/
↳registry-data clean
```

1.1.6 Api Documentation

glorpen.docker_registry_cleaner

`glorpen.docker_registry_cleaner.__version__`

Current package version.

`glorpen.docker_registry_cleaner.__description__`

Short package description.

`glorpen.docker_registry_cleaner.api`

`glorpen.docker_registry_cleaner.app`

`glorpen.docker_registry_cleaner.console`

`glorpen.docker_registry_cleaner.native`

`glorpen.docker_registry_cleaner.parser`

1.1.7 Selectors Documentation

`glorpen.docker_registry_cleaner.selectors`

Each selector has two tasks:

- check if given tag is supported by it
- find tags for deletion from set of supported tags

`glorpen.docker_registry_cleaner.selectors.base`

`glorpen.docker_registry_cleaner.selectors.simple`

`glorpen.docker_registry_cleaner.selectors.semver`

1.2 Indices and tables

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