Travis-CI - Build and Publish Docker Containers

# Script

#!/bin/bash -ev

# TravisCI Docker Build and Publish Script

# Ensure all required environment variables are present

if [ -z "$DOCKER\_IMAGE\_NAME" ] || \

[ -z "$DOCKER\_USERNAME" ] || \

[ -z "$DOCKER\_PASSWORD" ]; then

>&2 echo 'Required variable unset, automerging failed'

exit 1

fi

echo : "

Travis-ci docker build and publishscript

Repo: $TRAVIS\_REPO\_SLUG

Image: $DOCKER\_IMAGE\_NAME

"

# Create unique tag from git hash for versioning

branch\_head\_commit=$(git rev-parse --short=10 HEAD)

image\_commit\_tag="$DOCKER\_IMAGE\_NAME\_BASE:$branch\_head\_commit"

# Pull latest app image to cache from ( || true to catch errors if not in registery)

echo "Pulling latest $DOCKER\_IMAGE\_NAME"

docker pull "$DOCKER\_IMAGE\_NAME" || true

# Build image (add additional tags here)

echo "Building Image: $DOCKER\_IMAGE\_NAME"

docker build \

--cache-from "$DOCKER\_IMAGE\_NAME" \

-t "$DOCKER\_IMAGE\_NAME:latest" \

-t "$image\_commit\_tag" \

.

# Login to docker

echo "$DOCKER\_PASSWORD" | docker login -u "$DOCKER\_USERNAME" --password-stdin >/dev/null 2>&1

# Publish to dockerhub (pushes all tags)

echo 'Pushing images to docker'

docker push "$DOCKER\_IMAGE\_NAME"

# Detail

#### Automatically build and publish application container image to dockerhub using Travis-CI

Add docker service to travis build:

```yml

services:

- docker

```

Add script to project in suitable scripts directory:

```

./scripts/travis-ci/travis-ci-docker-build-and-deploy.sh

```

Add the travis-ci-docker-build-and-deploy.sh script to the travis-ci deploy hook (runs after successful tests) to ```travis.yml```:

```yaml

deploy:

provider: script

script: ./scripts/travis-ci/travis-ci-docker-build-and-deploy.sh

on:

branch: master

```

Ensure required environment variables are set in the build. For secret credentials, add to build directly on [travis-ci.com](<https://travis-ci.com>), or by using [Travis secure values](https://docs.travis-ci.com/user/encryption-keys/#usage).

```sh

DOCKER\_USERNAME=<docker-username>

DOCKER\_PASSWORD=<docker-password>

DOCKER\_IMAGE\_NAME=<name-of-docker-image-being-created-and-published>

```

Note: when adding environment variables as Travis-CI secure values they will only be available in pull requests created by trusted users. Therefore, if an outside user makes a pull request to your repository, they will not have access to your access token and the deployment will fail.

Note: Depending on when your travis-ci account was made, secret may require encrypting with the ``` --com``` flag. See [this stackoverflow]( <https://stackoverflow.com/questions/58152790/why-does-my-secure-travis-ci-environment-variable-not-work>) for more details