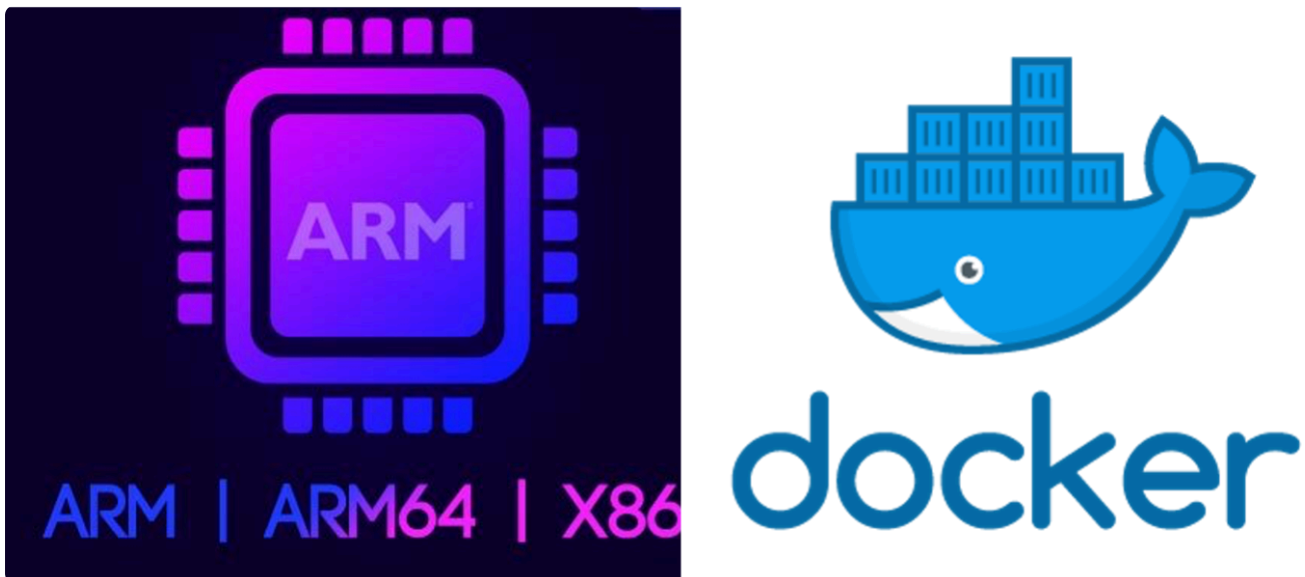


DIY Series: Docker build Image for Multi Architecture

(Apple Silicon M1 - Arm64)



With more and more arm64 based devices such as new Apple silicon SoC based MacBook devices are in use nowadays, the demand for docker image supporting arm64 architecture also increasing. But not all the images out there in the docker hub supports multiple architecture. While predominantly x86 & x86-64 bit intel based architecture images are available, developers and organisations started adding support for other architectures. You may find the supporting architecture in the tag section for every tag.

Description Reviews **Tags**

Filter Tags

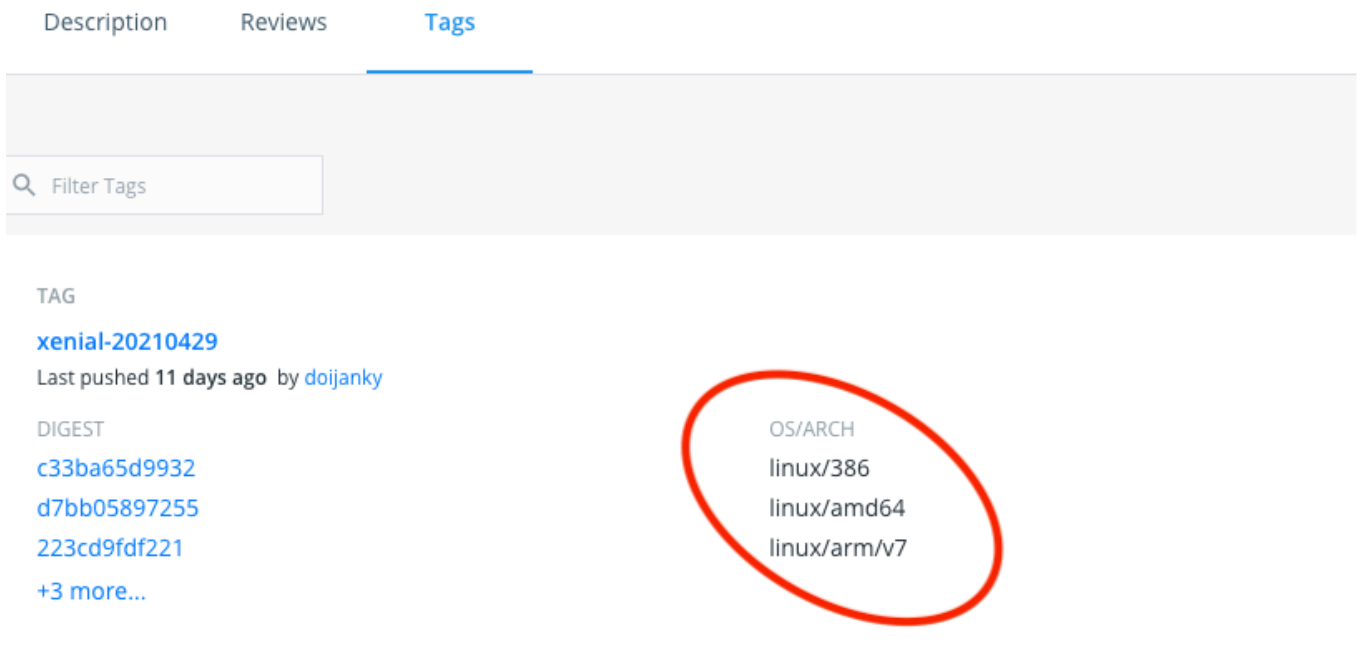
TAG

xenial-20210429
Last pushed 11 days ago by [doijanky](#)

DIGEST

[c33ba65d9932](#)
[d7bb05897255](#)
[223cd9fdf221](#)
[+3 more...](#)

OS/ARCH
linux/386
linux/amd64
linux/arm/v7



Having said, some of the official image does not support multi architecture yet. eg. mysql. But let's say, you want to build the your own image supporting multiple architecture including arm64(Apple silicon). How do we do it? Here comes a very handy tool - **docker buildx**.

Note: Make sure Experimental feature 'User new virtualisation framework' is disabled from docker desktop app.

Experimental Features

Use new virtualization framework

Enables the new Big Sur virtualization.framework instead of the hypervisor.framework. You must reset your Kubernetes cluster when enabling for the first time.

Lets get started

PREREQUISITE: BASIC DOCKER CLI KNOWLEDGE

Step1: Create and run new buildx container

Ensure that Docker Daemon is running in your system. By default with the latest version, there exist the a default buildx instance. To check this, from the terminal use

```
docker buildx ls
```

But this supports building only one architecture build at a time. So, lets create a new builder by using below commands

```
docker buildx create --name yourbuildxname  
docker buildx use yourbuildxname  
docker buildx inspect --bootstrap
```

Step2: Define Dockerfile.

Login to docker from terminal using '**docker login**'

- create a folder **mkdir test** & cd to test.
- Lets say our eg. docker file - Dockerfile content looks like below.

```
FROM jenkins/jenkins  
MAINTAINER sangeeth
```

Step3. Build and push

Now simple run from the test folder where your dockerfile exist.

```
docker buildx build --platform linux/amd64,linux/arm64 --push -t san
```

Here, note the argument for `--platform` can take one or more architecture comma separated. Also do note the `.`(dot) at the end of command indicator current directory.

Thats it!! You may go and check your registry (I used Docker Hub here) and start using this new image in the arm64 based devices.

Happy Dockering!!!

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