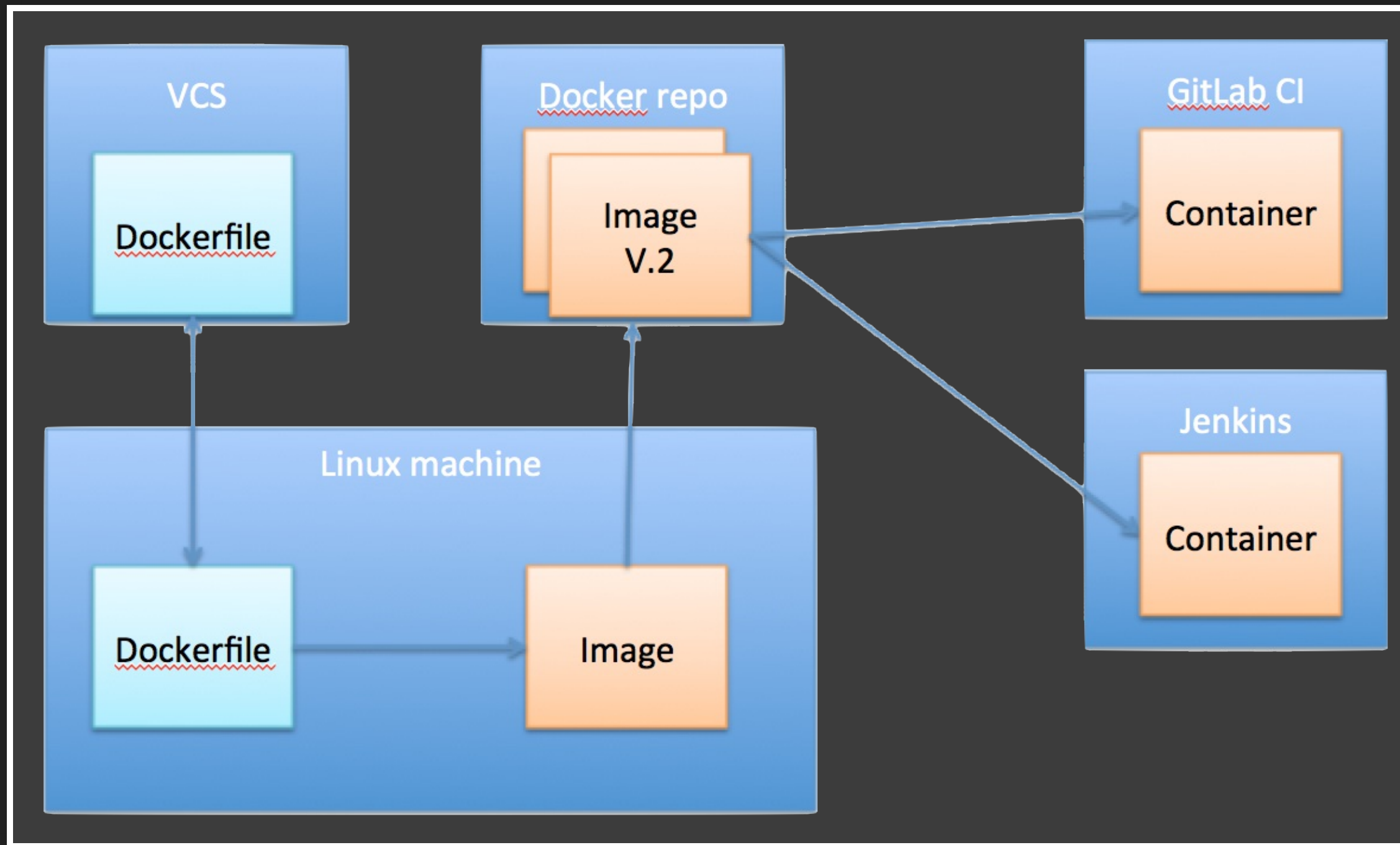


WINCC OA ON DOCKER

DOCKER INTRODUCTION

- Dockerfile is a set of "linux" commands and special build instructions
- Building a Dockerfile produces an **image**
- Image is tagged by version (label)
 - Same Dockerfile can generate many images
- Image instantiation creates a **container**
 - a brand new vm
- Image can be distributed via docker repos

BIG PICTURE



WINCC OA DOCKERFILE

Generic Dockerfile/images ([repo](#))

1. *slc6-winccoa*
2. *cc7-winccoa*

Description:

- Based on standard "SLC" image
- With WinCCOA (from en-dep-ice-scd website)
- With WPM (lastest available)

FW DOCKERFILE

Based on WinCC OA images, I made few images with WinCC OA project created. There are:

1. *fw-naked* (based on *slc6-winccoa*)
2. *unicos* (based on *fw-naked*)
3. *lhcservices* / *survey* / *cpc* / ... (based on *unicos*)

Issue: building a *cpc* image based on *slc6-winccoa* fails half of the time. It works fine with *unicos* parent.

Source: <https://gitlab.cern.ch/en-dep-ice-scada/docker>

CERN DOCKER REPO

<http://docker.cern.ch/>

- Has a **pilot** status
- You can request your own repo by mail
 - Mine is <http://docker.cern.ch/registrytags?amerezhi>

You need it when you want to use your image in different machines or by continuous integration.

GITLAB CI

- Designed for Docker images.
- [Example](#) of .gitlab-ci.yml:

```
unittest:
  image: estarter/wpm
  script:
    - nosetests WinCCOAPProjectManagement --verbose --with-coverage

cpc_app_integration:
  image: docker.cern.ch/amerezhi/unicos
  script:
    - python Applications/ucpcApplication.py -d --proj /opt/PVSS.
```


GITLAB CI BUILD OVERVIEW

Commit 3e17587ee6b611d126561ecdd799437675973da6


Download as

Browse Files

Revert

Authored by  **estarter** a day ago

1 parent 12bec3d6

 master

✓ build: passed

remove config xml files

Changes 10

Builds 9

9 builds in 72 minutes 10 seconds

Status	Build ID	Ref	Stage	Name	Duration	Finished at	Coverage
✓ success	#20966	master	test	cpc_app_integration	32 minutes 7 seconds	about 22 hours ago	↺
✓ success	#20964	master	test	fw_app_integration	1 minute 6 seconds	about 23 hours ago	↺
✓ success	#20965	master	test	un_app_integration	1 minute 2 seconds	about 23 hours ago	↺
✓ success	#20963	master	test	unittest	40 seconds	about 23 hours ago	73.0% ↺

live

GITLAB CI BUILD DETAILS

Build #20966 for commit **3e17587e** from master

✓ cpc_app_integration

✓ fw_app_integration

✓ unittest

✓ un_app_integration

✓ passed

32 minutes 7 seconds

about 22 hours ago

gitlab-ci-multi-runner 1.2.0 (3a4fcd4)

Using Docker executor with image docker.cern.ch/amerezhi/unicos ...

Pulling docker image docker.cern.ch/amerezhi/unicos ...

Running on runner-96f70e8a-project-1532-concurrent-2 via gitlabci03.cern.ch...

Fetching changes...

Removing Applications/fwApplication.pyc

Removing Applications/unicosApplication.pyc

Removing WinCCOAPProjectManagement/ProjectConfig.pyc

Removing WinCCOAPProjectManagement/downloadComponents.pyc

Removing WinCCOAPProjectManagement/getters/__init__.pyc

Removing WinCCOAPProjectManagement/getters/httpGet.pyc

Removing WinCCOAPProjectManagement/getters/jenkinsGet.pyc

Removing WinCCOAPProjectManagement/getters/nexusGet.pyc

Removing WinCCOAPProjectManagement/handleWinCCOAPProject.pyc

Removing WinCCOAPProjectManagement/osUtils.pyc

Removing repo/PVSSBootstrapper/PVSSBootstrapper/PVSSBootstrapper.pyc

Removing repo/PVSSBootstrapper/PVSSBootstrapper/WinCCOA.pyc

Removing repo/PVSSBootstrapper/PVSSBootstrapper/__init__.pyc

Removing repo/PVSSBootstrapper/PVSSBootstrapper/_python_compat.pyc

HEAD is now at 3e17587 remove config xml files

on https://gitlab.cern.ch/en-dep-ice-scada/WinCCOAPProjectManagement

[deleted] (none) -> origin/rm_config

Build #20966

Retry

Erase

Duration: 32 minutes 7 seconds

Created: about 23 hours ago

Finished: about 22 hours ago

Runner: #235

Commit

3e17587e

Branch: master

Author: estarter

Message: remove config xml files

live

JENKINS

1. Add a docker runner/image as a jenkins' node
2. Configure a job to be executed in the docker's container

JENKINS JOB CONFIG

- Set a job to be executed in the image label's node
([example job](#))

☒ Restrict where this project can be run ?

Label Expression ?

[Label](#) is serviced by 1 node

- Check container's info inside the build data



Docker Build Data

Host: http://cvl-plc-docker2:2375

Original Container Id: 3f752399c045934b573af393e3e83a4f3a4b0f7f97d5226bfa6b3eea9f8e5c3f

JENKINS - CONTAINER STATUS

List of servers and contrainers in [Manage Jenkins/Docker](#) page

Docker Server

Running Containers

Container Id	Image	Command	Created	Status	Ports
5e78e67235fa740401b756f1a2f81e730189fba0973d773f4bf12110b522b85c	docker.cern.ch/amerezhi/slc6-winccoa-docker	bash -c '/usr/sbin/sshd -D -p 22'	Thu May 12 16:00:33 CEST 2016	Up 5 seconds	com.githi

Images

Tag	Image Id	Created	Virtual Size
	a48fbdf4668c2f4978b4d86f330acb5b2ebf5bda07725a3f344e761bcb2e591f	Thu May 12 18:30:01 CEST 2016	1860419747
	9386bb69de878bd4b7db4499deb855d3ba2a2ef32be50e2005dbe055575e5e1b	Thu May 12 18:48:27 CEST 2016	1572365815

