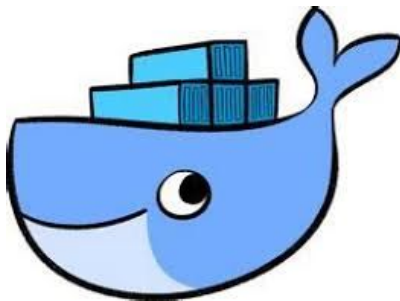


The Awesome Workshop: Virtual Docker Training

Awesome Organizers

hsf-training-virtual-docker-july2020@cern.ch

Clemens Lange
Sam Meehan
Brendan Regnery
Kevin Nelson
Adam Parker
Jackson Burzynski
Meirin Evans
Philipp Gadow
Lukas Heinrich
Robin Newhouse



HEP Software Foundation



27-30 July 2020

**If you aren't recording this on Zoom,
start the recording ...
(just a reminder)**

Everyone is Welcome

- All of you are here and *should* be here
 - Code of Conduct : [CERN](#)
- We are here to help
 - But have all levels of expertise!
- First time hosting a virtual training
 - Be patient!

*There is no such thing
as a “stupid question”!*



What did I sign up for?

Docker and Containerization

- Second in a series of 3 workshops - some people attended the first one, some people haven't
- Aim to teach best tools and practices for analysis preservation

Who is here?

- Those coming to hands on sessions
 - ATLAS : 32
 - CMS : 57
 - LHCb : 2
 - ALICE : 2
 - CERN-IT : 1
- ++ 80 other people who won't be attending the hands on sessions



Outline of training

- [1] Watch tutorials on Docker
 - And maybe go back and work through the Payload and CICD ones as well
- [2] Work through material in tutorials
- [3] Attend hands-on session
 - Discuss confusing parts in lessons
 - Implement same steps for your analysis

Monday

Welcome

Kickoff/Orientation
[15-16 CET]

Tues/Wed

Work on your own, when you want

Watch and work through tutorials:
[Docker by Brendan](#)

You may need :
[Payload by Kevin](#)

You may need :
[CI/CD by Giordon](#)

Thursday

Hands-on sessions

Block 1:
[8-10 CET]

Block 2:
[10-12 CET]

Block 3:
[12-14 CET]

Block 4:
[14-16 CET]

Block 5:
[16-18 CET]

Block 6:
[18-20 CET]

Monday

Welcome

Tues/Wed

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Thursday

Hands-on sessions

Kickoff/Orientation
[15-16 CET]

Watch and work through tutorials:
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You may need :
[Payload by Kevin](#)

You may need :
[CI/CD by Giordon](#)

Get on the same page with
logistics and debug initial
docker setups/installations

Block 1:
[8-10 CET]

Block 2:
[10-12 CET]

Block 3:
[12-14 CET]

Block 4:
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Work through all of the content here and learn/work at your own pace with our virtual support on Mattermost

Block 1:
[8-10 CET]

Block 2:
[10-12 CET]

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Monday

Welcome

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Work on your own, when you want

Thursday
Hands-on sessions

Kickoff/Orientation
[15-16 CET]

Watch and work through tutorials:
[Docker by Brendan](#)

Join the room indicated on indico
for your specific hands-on session.
Look for your name on indico to
know when/where to join.

[Payload by Kevin](#)

Day need :
[Energy by Gordon](#)

Block 1:
[8-10 CET]

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[12-14 CET]

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[14-16 CET]

Block 5:
[16-18 CET]

Block 6:
[18-20 CET]

Watch the Videos

Watch the videos in order on the playlist



youtube.com/playlist?list=PLWZ1NKCZTdqntEx_CkFTP_3uZWcDQgxy

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Gaming

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YouTube Premium
YouTube Movies

GitLab CI/CD Tutorial
13 videos · Updated yesterday

Unlisted

Giordano Stark

SUBSCRIBE

- 00: Setup (6:19) Giordano Stark
- 01: Introduction to CI/CD (6:53) Giordano Stark
- 02: Exit (Light) Codes (10:36) Giordano Stark
- 03: Understanding Yet Another Markup Language (11:07) Giordano Stark
- 04: YAML and CI (7:17) Giordano Stark
- 06: Hello CI World (9:42) Giordano Stark
- 07: Adding CI to Existing Code

Introduction - Continued from...

Home

Code of Conduct Setup Episodes Extras License Improve this page

Continuous Integration / Continuous Development (CI/CD): Introduction

Prerequisites

This assumes that you'll have some basic background with your command line, for example:

- How to execute custom shell scripts
- How to run python scripts

as well as having gone through all previous sessions in this workshop.

Introduction

At CERN, we use GitLab to host our code. GitLab is bundled with a built-in CI/CD system that we'll learn how to develop on to make our code robust to errors, preserved, and reproducible.

The aim of this module is to:

- explore what it means to build a CI/CD workflow
- expand on concepts unique to GitLab's CI/CD which is essential to anyone working in ATLAS

The skills we'll focus on:

- Making scripts exit correctly
- Building a CI/CD workflow of unlimited potential
- Understanding how job runners work (and get access to your clones)

The GitLab CI/CD system provides information on how to set up CI/CD for your jobs to run

Integration / Continuous Development tutorial

Subtitles/closed captions (c)

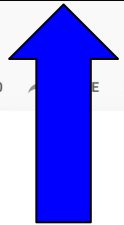
01: Introduction to CI/CD

Unlisted

9 views · May 26, 2020

0:03 / 6:52

Subtitles/closed captions (c)



Turn on caption here!

Discuss on Mattermost

- Mattermost:
 - Join [Workshop Mattermost](#)
 - You should have all been added
 - Go to [More...](#)
 - Join channel corresponding to what you need
 - Post a question with @all in case you don't receive an answer
- [CERN IT Mattermost](#)
 - Also a good generic resource for more involved questions



A screenshot of the Mattermost web interface. The window title is '* Town Square - AW Docker 07/27 CERN Mattermost'. The left sidebar shows a list of channels: 'At' (with a user icon), 'PUBLIC CHANNELS' (with a plus sign), 'Off-Topic', 'Town Square' (with a yellow boot icon), 'More...', 'PRIVATE CHANNELS' (with a plus sign), 'Organizers', 'DIRECT MESSAGES' (with a plus sign), and a list of users including Adam Jackson Par..., Aidan Grummer, Aishik Ghosh, Alessandra Forti, Andy Chen, Anna Stakia, Anni Xiong, Brendan Regnery, and Christos Vergis, Ka... At the bottom of the sidebar is a 'Switch Channels - ⌘K' button. The main content area is titled 'More Channels' and features a search bar with the placeholder text 'Search channels'. Below the search bar, there are three channel listings: 'Docker Installation' with a 'Join' button, 'For non-CERN Folks' with a 'Join' button, and 'The Videos' with a 'Join' button. At the top right of the main area is a 'Create Channel' button with a close icon. At the bottom of the main area is a text input field with the placeholder 'Write to Town Square'.

Join the Hands-on Session

- Find your name here - <https://indico.cern.ch/event/934651/timetable>
 - If you don't find it and want to attend a hands-on session, just email us
- Join the zoom room at the allotted time with your assigned Mentor

Mentor :

Philipp Gadow

Participants :

Ajay Kumar
Arkady Lokhovitsky
Maria Popa

Virtual Docker Training (27-30) x +

indico.cern.ch/event/934651/timetable/?view=standard

the same videos as ...

THURSDAY, 30 JULY

08:00 → 10:00	Hands-on Sessions #1 : Brendan	🕒 2h ⌵
Speakers: Adrian Rodriguez Rodriguez (ICSC - World Laboratory (CH)), Louis D'Eramo (Northern Illinois University), Matteo Presilla (Universita e INFN, Padova (IT)), Rongkun Wang (Univ. of Michigan (US) / Univ. of Sci. & Tech. of China (CN))		
08:00 → 10:00	Hands-on Sessions #1 : Philipp	🕒 2h ⌵
Speakers: Ajay Kumar (University of Delhi (IN)), Arkady Lokhovitsky (University of Canterbury (NZ)), Maria Popa Zoom Link		
10:00 → 12:00	Hands-on Sessions #2 : Adam	🕒 2h ⌵
Speakers: Jose Manuel Clavijo Columbie (Deutsches Elektronen-Synchrotron (DE)), Oscar Fernando Garzon Miguez (Fermi National Accelerator Lab. (US)), Ruchi Chudasama (Tata Inst. of Fundamental Research (IN)), Xavier Coubez (Brown University (US) and Rheinisch Westfaelische Tech. Hoch. (DE)), Yongbin Feng (University of Maryland (US)) Zoom Link		
10:00 → 12:00	Hands-on Sessions #2 : Meirin	🕒 2h ⌵
Speakers: Benyounes Bel Moussa (Mohammed V University (MA)), Diallo Boye (University of Johannesburg (ZA)), Mr Florian Bury (UCLouvain - CP3), Simon Berlendis (University of Arizona (US)), Sizar Aziz (Université Paris-Saclay (FR)) Zoom Link		
10:00 → 12:00	Hands-on Sessions #2 : Philipp	🕒 2h ⌵
Speakers: Abraham Tichelman Charay (Northwestern University (US)), Anil Sanyal (The University of Science and Technology (USTC) (CN)), Marcin		

Do these things now

- [0] Join the mattermost - [Link Here](#)
- [1] Fill out the pre-training [survey](#)! - Do it now! It will take 5 minutes
- [2] Check your [docker setup](#) : does `docker run hello-world` work?

Feel free to leave when you are finished, or unmute/raise hand to ask questions ...

