

DAPHNE4NFDI Software practice workshop @ EuXFEL

Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction to good DevOps practice

Monday 24 February 2025 14:00 (30 minutes)

Concepts and instruments like Git (GitLab/GitHub), collaborative development, continuous integration, versioning and deployment are introduced on a basic level

Primary author: DO CARMO TEODORO, Matheus

Co-author: CARINAN, Cammille (European XFEL)

Presenters: CARINAN, Cammille (European XFEL); DO CARMO TEODORO, Matheus

Session Classification: Tutorial talks: CI, Deployment approaches and introduction to containers

Track Classification: Introductory software practice session

Contribution ID: 2

Type: **not specified**

Package and framework deployment at European XFEL

Monday 24 February 2025 14:30 (30 minutes)

Use case presentation on how a Python environment for scientific data analysis software is deployed and maintained.

Presenter: ROSCA, Robert (European XFEL)

Session Classification: Tutorial talks: CI, Deployment approaches and introduction to containers

Track Classification: Introductory software practice session

Contribution ID: 3

Type: **not specified**

Continuous integration and deployment at DESY FS-SC

Monday 24 February 2025 15:00 (30 minutes)

Use case presentation on how software code is integrated and scientific packages deployed in the DESY photon science / scientific computing group.

Presenter: TIRUMALAI NALLAM CHAKRAVARTY, Parthasarathy (DESY)

Session Classification: Tutorial talks: CI, Deployment approaches and introduction to containers

Track Classification: Introductory software practice session

Contribution ID: 4

Type: **not specified**

Introduction to containers

Monday 24 February 2025 15:30 (30 minutes)

Basic concepts of when to decide for containerisation and of how to build and use containers are presented.

Presenter: FELDER, Christian (Forschungszentrum Jülich GmbH)

Session Classification: Tutorial talks: CI, Deployment approaches and introduction to containers

Track Classification: Introductory software practice session

Contribution ID: 5

Type: **not specified**

Orchestration with docker-compose –Deployment of HZB metadata catalogue as practical example

Tuesday 25 February 2025 09:00 (30 minutes)

Use case presentation on how containers are used the deployment context regarding infrastructural service components, like the metadata catalogue, at HZB

Presenter: KRAHL, Rolf (Helmholtz-Zentrum Berlin für Materialien und Energie)

Session Classification: Tutorial talks: containerisation and virtualisation specifics

Track Classification: Containerisation specifics session

Contribution ID: 6

Type: **not specified**

DECTRIS container services

Tuesday 25 February 2025 09:30 (30 minutes)

Presenter: LARSEN, Camilla (DECTRIS)

Session Classification: Tutorial talks: containerisation and virtualisation specifics

Track Classification: Containerisation specifics session

Contribution ID: 7

Type: **not specified**

CI-, containerisation- and virtualisation workflows

Tuesday 25 February 2025 10:00 (30 minutes)

This talk will explain how relevant technologies (Docker, Apptainer, K8s) can be combined to orchestrate both deployment workflows and cloud component maintenance/control in modern web-app contexts like the VISA platform.

Presenter: SCHUH, Michael (European XFEL, DESY, DASHH)

Session Classification: Tutorial talks: containerisation and virtualisation specifics

Track Classification: Containerisation specifics session

Contribution ID: 8

Type: **not specified**

Kubernetes applied to an image processing service

Tuesday 25 February 2025 10:30 (30 minutes)

In this talk important features of Kubernetes (k8s) are demonstrated. Use case is a comparison of zmq- and k8s-based implementations of a simple image processing service.

Presenter: KHOKHRIAKOV, Igor (DESY)

Session Classification: Tutorial talks: containerisation and virtualisation specifics

Track Classification: Containerisation specifics session