Best practices guide

From the "Do's and don'ts industry workshops"

EuroCC2 & CASTIEL2

Summer 2024

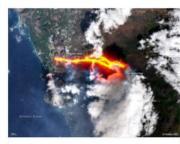
With NCC Slovenia and the CoEs CHEESE and EoCoE

NEWS ARTICLE | Publication 15 November 2021

EU Centre of Excellence in High Performance Computing: ChEESE's urgent computing in the service of Cumbre Vieja volcanic eruption

The EU-funded ChEESE Centre of Excellence uses supercomputers to predict the behaviour of volcanic ash clouds and aerosols, helping crisis management of the Cumbre Vieja eruption in La Palma, Canary Islands

The Cumbre Vieja's eruption, which began in September 2021, has produced devastating lava flows and emissions, resulting in the evacuation of more than 6000 people, the destruction of dozens of houses, and the disruption of aerial navigation. In response to this, the "urgent computing" capacities (emergency use of computing resources to deal with disaster situations) of the ChEESE EU Centre of Excellence at the Barcelona Supercomputing Center have been vital. ChEESE scientists have been running simulations of the ash clouds and aerosols triggered by the ongoing volcanic activity, using the MareNostrum-4 pre-exascale supercomputer. These simulations provide forecasts for the eruption's evolution and cover the Canary Islands at a 1 km resolution and the wider region at a 5 km resolution. As a result, the PEVOCLA committee composed of



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Inputs extracted from the presentations made by NCC Slovenia and the CoEs CHEESE and FoCoF

"Interactions with

public administration &

On May 27th 2024



DO's

" Interactions with public administration & co"

Ensure connections for future collaborations

Connect public administration, industry, and academia

LINKING THE PUZZLE PIECES











OPEN SCIENCE AND FAIR DATA

SUPERCOMPUTING

COLLABORATION

DO's

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Involve them from the very beginning; co-design is fundamental to cover user needs

Regulations, roles and protocols are important, particularly in emergency situations (UC service)

Clarify "who does what", including access to computational resources

How the ChEESE CoE approaches

Urgent computing

Solve capability/capacity problems under strict time constrains in terms of time-to-solution (emergency situations)

Exascale machines to reduce timeto-solution to operational constrains

Involves service enabling in collaboration with public bodies in charge of emergency management (volcanoes, earthquakes, tsunamis)

DO's

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Define everyone's roles

- If you are going to involve institutional actors, make sure the topic matches their field. Engage the institution on topics of interest to them.
- Map your goals and define your needs. You are reaching out to them for specific things, not asking for a general advice.

Ensure you maintain the correct distance with the institution

- Follow protocol. Always follow protocol.
- Map your contact points. Find the right interlocutor, including amongst high-ranking people.
- Be patient. Institutions are slow-moving structures.

Track your communications

- Start early so you are not the one responsible for any rush.
- Use global mailing addresses whenever you can, on top of the individual addresses
- Save your mails so you can retrace the whole process

Don'ts

Take too little time for the organisational aspect

Have no clear
delineation of
cooperation with
sponsors, partners and
organisers

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Pay too little attention on promoting the event in the media

Don'ts

Don't rush, and don't be hasty!

- ➤ Don't wait before you put your PO in the loop!
- ➤ Don't rush into calling the higher-ups
- ➤ Don't dispense of EU etiquette.

" Interactions with public administration & co"

Dares - When can I go over someone's head?

- ➤ Make sure you have exhausted other options
- ➤ Make sure you can justify doing it
- ➤ Be aware that they will be some blowback! Prepare for it.





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