Day 3

Orchestration and scheduling

Animation: Frédéric Osterrath (CRIM), Carsten Ehberecht (DKRZ), David Byrns (CRIM), Tom Landry (CRIM)

In this session, we seek to exchange on the complex subject of software orchestration, scheduling and distributed computing. Recent implementations of scedulers at DKRZ and CRIM augmented PyWPS with HPC and hybrid cloud capabilities. We will demonstrate and elaborate on container-related approaches such as Docker Compose and Kubernetes. Participants will also present their recent findings on DevOps-oriented and computing-oriented tools and frameworks.

References:

- PyWPS Job Sceduler extension
- OGC Testbed-13 TIES
- DevOps DockerSwarm

Architecture: EO activities at CRIM & EO services

Animation: Samuel Foucher (CRIM), Nils Hempelmann (GIZ)

For several years, CRIM has been developping EO solutions and remote sensing methods in a wide array of applications. In this session, we will review past projects and published work that might be relevant to the climate sciences research community. Participants will then be asked to share their views on what EO services would be of use in the short term and how they could be constructed, exposed and managed.

References: TODO

Architecture: Thematic platforms

Animation: Tom Landry (CRIM), Carsten Ehberecht (DKRZ)

As we near the end of the PAVICS project and embark on its sustainability phase, we review its main architectural choices and their limitations. We compare and contrast with other thematic platforms developed at CRIM, namely VESTA, ADNOTARE and PACTE. We review the UI elements of Phoenix that can be of use to the developers or end users. Participants will be asked to identify potential reuse or adaptation opportunities further helping with sustainability of platforms. If time allows, we introduce ESA's Thematic Exploitation Plaforms (TEP) and discuss how they relate to OGC next generation's services.

References:

• ESA TEP